INFORMATION RESOURCE MANAGEMENT: AN EVALUATIVE STUDY OF LIBRARIES IN AFFILIATED COLLEGES OF BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI

Thesis

Submitted to Bharathidasan University in partial fulfilment of the requirements for the award of the Degree of

DOCTOR OF PHILOSOPHY

IN

LIBRARY AND INFORMATION SCIENCE

Submitted by

A.VICTOR, M.L.I.Sc., M.Phil
(18974 /Ph. D /Lib. & Inf. Sci./PT/Oct.2009)

Research Supervisor

Dr. (Mrs.) V. GEETHA M.A., M.L.I.Sc., Ph.D.,
Associate Professor



P.G AND RESEARCH DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE,
BISHOP HEBER COLLEGE (AUTONOMOUS),
(Nationally Reaccredited at the A+ Level by NAAC)
TIRUCHIRAPPALLI – 620 017, INDIA

APRIL 2014

Dr. (Mrs.) V. GEETHA M.A., M.L.I.Sc., Ph.D.,
Associate Professor,
P.G and Research Department of
Library and Information Science,
Bishop Heber College (Autonomous),
Tiruchirappalli – 620 017

CERTIFICATE

This is to certify that the thesis entitled "**INFORMATION RESOURCE MANAGEMENT: AN EVALUATIVE STUDY OF LIBRARIES IN AFFILIATED COLLEGES OF BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI"** is the bonafide research work carried out by **A.VICTOR, M.L.I.Sc., M.Phil** (18974 /Ph. D /Lib. & Inf.Sci./PT/Oct.2009) of Bharathidasan University, during the period 2009-2014, in partial fulfilment of the requirements for the award of the degree of **DOCTOR OF PHILOSOPHY** in Library and Information Science and that the thesis has not formed the basis for the award previously of any other Degree, Diploma, Associateship, Fellowship or any other similar title to any candidate in any University, and that the thesis represents entirely an independent work on the part of the candidate.

Place: Tiruchirappalli **Signature of the Research Supervisor**

Date:

DECLARATION

I hereby declare that this thesis, entitled "**INFORMATION RESOURCE MANAGEMENT: AN EVALUATIVE STUDY OF LIBRARIES IN AFFILIATED COLLEGES OF BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI"** submitted to Bharathidasan University in partial fulfilment of the requirements for the award of the degree of **DOCTOR OF PHILOSOPHY** in Library and Information Science is the original research work done by me during 2009-2014 under the guidance of **Dr. V. GEETHA,** Associate Professor, PG and Research Department of Library and Information Science, Bishop Heber College, Tiruchirappalli, Tamilnadu and the thesis has not formed the basis for the award of any other Degree, Associateship, Fellowship or any other similar titles to any candidate in any University.

Place: Tiruchirappalli

Date: **Signature of the Research Scholar**

ACKNOWLEDGEMENT

This research work could not have been completed without the encouragement, suggestions and assistances which I have received from many people at different stages of this work.

Every act of human being is under the adjudication of the most exalted, omnipotent and Almighty God. In the light of this fact, I thank the Almighty by whose blessings, I could complete this venture in stipulated parameters of time in a successful manner.

I would like to convey my gratitude to my research supervisor **Dr. V. GEETHA**, Associate Professor, PG and Research Department of Library and Information Science, Bishop Heber College, Tiruchirappalli. She provided me unflinching encouragement and support in various ways which exceptionally inspired and enriched my growth both as a student and researcher.

I take this opportunity to express my sincere gratitude to **Dr. D.PAUL DHAYABARAN,** Principal and **Dr. M. MARCUS DIEPEN BOOMINATHAN**, Former Principal, Bishop Heber College, for providing me an opportunity to pursue the Doctoral program in this reputed institution.

I also thank The **Director** and **Joint Director** of Public libraries, Tamilnadu and **District Library Officer**, Chennai for permitting me to continue my research work.

I owe a special debt of gratitude to the Doctoral Committee Members **Dr. B.S. SWAROOP RANI**, Associate Professor, PG and Research Department of Library and Information Science, Bishop Heber College, Tiruchirappalli and **Dr. J.P.S. KUMARAVEL,** Associate Professor & Academic Co–ordinator, Dept. of Library & Information Science, Directorate of Distance Education Wing, Madurai Kamaraj University, Madurai for their encouragement and suggestions.

I express my sincere gratitude to my teachers **Dr S. ALLY SORNAM**, Associate Professor and Head, **Dr A. MANOHARAN,** Associate Professor, PG and Research Department of Library and Information Science, Bishop Heber College, Tiruchirappalli and **Dr. JESUDOSS MANALAN,** Librarian, Bishop Heber College for their steadfast support, guidance and help.

I express my thanks to **Dr. S. GOPALAKRISHNAN (Rtd.) and Dr. K.S. SIVAKUMAREN** Assistant University Librarians, Anna University, Chennai for giving their insightful comments in the completion of various tasks associated with this work and **Dr. J. EDWARD MANICKAM,** Rtd. Professor of English for his intelligible proof reading of the thesis and making it error free.

I also thank **Dr. J. FRANKLIN**, **Mr. R. SELVARAJ** and **Ms. ELDINE** Assistant Professors, PG and Research Department of Library and Information Science, Bishop Heber College, Tiruchirappalli for their kindness and cooperation.

It is my pleasure to thank all the **Librarians** and **Users** of Arts and Science colleges affiliated to Bharathidasan University for providing the necessary data for my research work.

I owe my sincere thanks to my friends **Mrs. P.M. RAINA, Mr. S. MANIKANDAN, Mr. R. BASKARAN, Mr. D. RAVIKRISHNAN, Mr. D. SMITH, Mr. K. KUMAR, Mr. T. JACOB, Mr. MANDIRAMOORTHY** who supported and helped me in number of ways throughout my research.

I bow my head in reverence and respect to my late father **Mr E. ADAIKALA SAMY** and my mother **A. JULIMARY** who made me what I am. I express my special thanks to my wife **Mrs A. DARATHY**, Son **V.A.A. IGNATIUS** and all the members of my family for their constant encouragement.

A.VICTOR

ABBREVIATIONS

CAS	Current Awareness Service
CIS	Centralized Information Source
HR	Human Resource
IFA	International Federation of Accounts
ILL	Inter Library Loan
IRM	Information Resource Management
M	Mean
NAAC	National Assessment and Accreditation Council
OPAC	Online Public Access Catalogue
PG	Post Graduate
R	Rank
RE	Responses
SD	Standard Deviation
UG	Under Graduate
UGC	University Grants Commission

CONTENTS

List of Tables

List of Figures

CHAPTER I

INFORMATION RESOURCE MANAGEMENT

In the Information society, Library and Information Centers acquire information sources to meet user needs and keep users well informed about the current developments in their discipline. At the intermediate level, Library and Information Centres meet the challenges of exponential growth of information sources and inadequate time of users for reading and assimilating new information. To overcome these barriers, Library and Information Centres have to manage information resources in the proper way.

1.1 ORIGIN OF INFORMATION RESOURCE MANAGEMENT (IRM)

The term “Information Resource Management (IRM)" was originally coined in the 1970’s by the President's Commission on Federal Paperwork and later embodied in statute in the Paperwork Reduction Act (US) of 1980.

According to Paperwork Reduction Act, the stages of Information Resource Management are

- Design
- Creation or collection
- Analysis
- Use
- Dissemination and
- Storage or disposition.

Two aspects of Information Resource Management are the following:

- The management of information is considered as a resource
- The management of those resources is associated with information related to computers, telecommunications, personnel and funds. **(Management of federal information resources Circular, 1987)**

1.2 DEFINITION

Information Resources Management means "the planning, budgeting, organizing, directing, training, promoting, controlling and management activities associated with the burden, collection, creation, use and dissemination of information by agencies and includes the management of information related resources such as automated data." (**United States Code, 1980 version**)

Information Resource Management is a technique of managing information as a shared organizational resource. It includes a. identification of information sources b. type and value of information they provide c. ways of classification, valuation, processing and storage of that information.(**Business Dictionary)**

Information Resource Management (IRM) is the function of controlling and coordinating all of the resources required to produce information, such as data, systems, and business resources. The concept of IRM is analogous to Materials Resource Planning (MRP) as used in manufacturing." (**Bryce, 2007**)

Information Resources Management (IRM) refers to the process of managing information resources to accomplish the mission of the organization. Information Resources (lR) include information itself, as well as related resources such as personnel, equipment, funds, and IT. IT is a subset of Information Resources and refers

to the hardware and software operated by the organization to accomplish particular functions, regardless of the technology involved (e.g. computers, telecommunications, etc.). (**United States International Trade Commission Audit Report, 2000**).

Information Resource Management includes the management of

- The broad range of information resources, such as printed sources, electronic Information sources, microforms, etc..
- The various technologies and equipment that manipulate these resources, and
- The people who generate, organize, and disseminate those resources. Overall the intent of Information Resource Management is to increase the usefulness of information both to the government and to the public (**Gary D. Blass** et al, 1991)

1.3 STUDIES ON INFORMATION RESOURCE MANAGEMENT

Various studies were done in Information Resource management. Some of the studies are listed here. (**Bruce, 1995**)

01. As early as 1979, Diebold addressed the Information Resource Management concept where he stated that "It is clear that the organizations which excel… will be those that recognize information as a major resource and structure it as efficiently as they do other assets".

02. Guimaraes extensively reviewed three predominate views of information resource management. They are

    a. Information Resource Management is the management of information as a resource,

    b. IRM as the management of information systems development and

    c. IRM as the management of computing resources.

03. Holmes suggested the notations of the convergence of information technologies and top information executives to manage them.

04. Poppel proposed Information Resource Management as a mechanism to convert business goals into strategic objectives.

05. Horton elaborated on the idea that Information Resource Management included multiple information handling technologies and functions, information as a valuable resource in the organization and Information Resource Management encompassed the management of both information and information technologies.

06. Synnott and Gruber discussed IRM as a means of tying management of the information resource to overall goals of the organization. They also introduce the term "Chief Information Officer" (CIO) for the senior executive responsible for organization wide information and technology policy.

07. Lytle noted that IRM the data administration function and emphasized the convergence of data processing, data communication and automation technologies and the management of the phenomena.

08. Trauth observed those two phenomena, the concept of knowledge work and development of advanced computational and communication technologies led to the advent of Information Resource Management. She traced the development of Information Resource Management to three management disciplines covering database, records and data processing and noted the three goals of IRM : they were to advance a global view of organization data, position the information management function at a high level in the organization and integrate both the technology and data of the organization.

1.4 PRINCIPLES OF INFORMATION RESOURCE MANAGEMENT

The resources of Library and Information Centers represent a significant cost factor. The information resources (human, financial, equipment, material, and facilities)

must be very effectively managed based on several information resource management principles. They are as follows:

- Responsibility and authority of Information Resource Management must be clearly designated to manage the limited resource on behalf of the institution.
- Since information source is not free, the limitations must be recognized and managed so that enough information can be provided when and where required.
- Information resource must be controlled and allocated in such a way that it is available whenever it is needed and should cater to the needs of the user.
- Constant tracking of information source by the library professionals is mandatory so that he is always aware of all the resources available, its location, condition and the method to access it when necessary.
- Information source requires proper storage and it is maintained for ready usage whenever required.
- A clear forecasting of the information resources by the management will ensure adequate information resource when required by the users.

1.5 OBJECTIVES OF INFORMATION RESOURCE MANAGEMENT

- Information Resource Management helps to enhance the quality, applicability, accessibility and value of the information sources provided to the user community in the Library and Information Centers.

The success of library depends on four fundamental principles given by **IFA** (International Federation of Accountants)

- Information sources are valuable resources that require proper management.
- Most of the information sources are highly needed and usable.

- The ability to disseminate and use information sources more effectively is critical success factor of the library and information centre.
- Library and Information Center should incorporate a broad view of Information Resource Management.
- Information Resource Management ensures the maximum utilization of opportunities which could provide a positive drive in the direction of a library's routine works. Information Resource Management has a strategic view on how information systems can increase the opportunities available to an organization and also how to extend traditional library work boundaries to include information resource links with users and information sources.
- Library authorities must emphasize on strategic planning of Information Resource Management in order to gain a competitive advantage as they move into an era of increased automation and global competition. It can streamline the library functions, improve managerial decision making, create new services and enhance the relationships with Users, Management, Publishers and Sellers.
- The ultimate goals of an effective Information Resource Management are the design, dissemination and maintenance of information source.
- Information Resource Management helps to improve services productivity, efficiency and effectiveness, methods for measuring progress towards organization goals and clear roles and responsibilities for achieving those goals.
- The three key steps involved in planning of Information Resource Management practices in any Library and Information Centers are to

1. Determine strategic information resource requirements,
2. Baseline the existing environment and
3. Design and process of Information Resource Management

- In other words, the objectives of Information Resource Management are

1. To provide information for standardization,
2. Improve information source integrity and quality,
3. Minimize and control information source redundancy,
4. Decrease application development costs and
5. Increase the effectiveness of information management

Daniel L. Moody and Graeme C. Simsion have identified eight primary goals and metrics to measure the effectiveness of Information Resource Management which are shown in the diagram below.

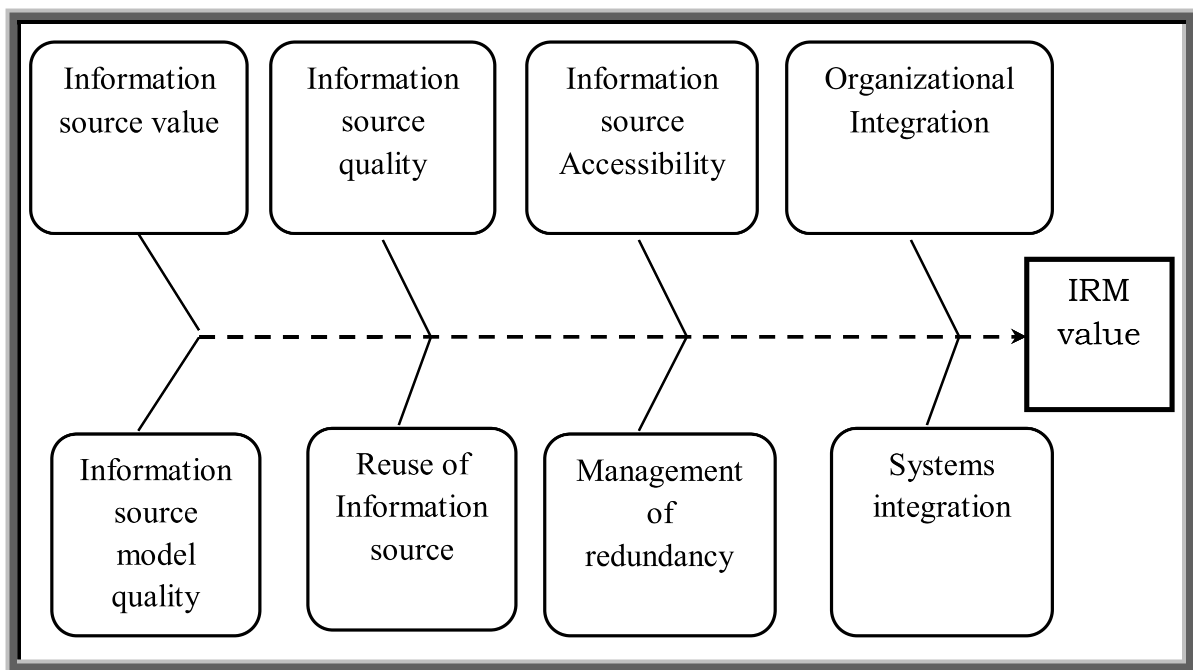


Figure 1.1 Goals of Information Resource Management

1.6 SCOPE OF INFORMATION RESOURCE MANAGEMENT

1. The goals and objectives of library and information centre form the basic foundation of the Information Resource Management strategic planning process. The challenges faced by Library and Information Centre are

   - What library it wants to be in?
   - Core activities of the library
   - Identification and analysis based on the critical factors to Information Resource Management's future success
   - Information Resource Management's marketing of library products and services
   - Studying the library's users and their needs and
   - Analysing the strengths and weaknesses of the library.

2. The principles describe the statements of preferred direction, goals and concepts for guiding the development and use of technology in support of an Information Resource Management environment. In these instances, the approach outlined will provide a systems approach and an appropriate framework for the decision-making process.

3. The principles are subject to modification according to the size of the collection, type of services, the users and library requirements change. Adoption of these principles will have a profound impact on the management of information sources, the structure and configuration of technical facilities, and the delivery of responsive, value-added services to users.

4. The Information Resource Management plan will help in the design and implementation of the information systems necessary to support the library's objectives and activities.

5. The following stages are involved in the Information Resource Management process. They are respectively translating the strategic library's plan into strategic information source requirements, constructing Information Resource Management models based on identified strategic information requirements, constructing target process from the library structures, creating a strategic implementation plan that specifies how the target processes are to be implemented and conducting a post-implementation review to ensure that Information Resource Management is achieving its intended objectives.

1.7 INFORMATION RESOURCE PARADIGM

Larry P. English has suggested a pattern of Information Resource Management components in his website.

Table 1.1

Information Resource Paradigm

S. No.	Resource characteristics	Financial resource	Human resource	Information source
1	Planning (vision)	Strategic financial plan, Budget	Strategic HR plan, Tactical staff plan	Strategic information plan, Value centric Development plan
2	Organizing	Centralized financial planning, Distributed management, Decentralized budget deployment	Centralized HR planning, Distributed management, Decentralized employee deployment	Centralized Information Source (CIS) planning, CIS Processing and application

S. No.	Resource characteristics	Financial resource	Human resource	Information source
3	Directing	Financial policy (Spending Authority), financial management education	Hiring, promoting, Development, HR management education	Information policy : Shared among all needed users Source management accountability Information management and IQ education
4	Control	Within budget Management accountability	Meet objectives, Management accountability	Meet user needs, Meet information quality standards, Management Accountability
5	Structure	Standard chart of accounts and definition	Organization chart and Standard job description	Common information source model
6	Current position	Financial statements, Profitability	Headcount, Productivity	Repository information source and reuse, Information source usability metrics
7	Resource differences	Consumable, Required to pay	Assignable, Required to "do"	Sharable, Reusable, required to manage other resources

(Source: www.infoimpact.com)

1.8 KEY ISSUES OF INFORMATION RESOURCE MANAGEMENT

The CAUSE committee has developed a list of key issues relating to Information Resource management. They are respectively

- Integrating Information Resource management with institution wide strategic planning,
- Restructuring of fundamental activities of the institutions,
- Management of the change process,
- Support of distributed computing,
- The networked information environment,
- The changing communication paradigm,
- Open access systems and information technology architecture,
- Network access and security and
- Diversity found in Information Resource management.

1.9 PERSPECTIVES OF INFORMATION RESOURCE MANAGEMENT (IRM)

A. **Lewis** (1993) has noted different perspectives of Information Resource Management such as:

- **Information :** IRM as the exploitation of the value of information considers information as an institution asset equivalent in importance to capital and human resource.
- **Administration :** This perspective relates to the technical aspects of managing data including the collection of information of sources, circulation details, weed out documents, User details, library staff members details, furniture and equipment details, library requirements, software for library, requirement analysis, etc..
- **Technology :** It includes computing and communications technologies for handling information resources.

- **Management :** The management approach requires the tailoring of the concept to the library and information centres in which it is established, determining the governance mechanism for the Information Resource Management program, identifying the library information resource architecture (including information source, human source and financial source) and establishing standards.

- **Organizational aspect :** This perspective describes the strategies for organizing and implementing an Information Resource Management structure, and the chief librarian is the responsible for the Information Resource Management function and is concerned with planning and policy development and responsible for day-to-day library operations.

The following **Six basic trends** affect Information Resource Management.

1. New information technologies (IT) increasingly create new library options and opportunities.

2. Increasingly, organizations are viewing information source as assets capable of enhancing library performance. This new attitude will force organizations to rethink about the management of resources.

3. The information environment will continue to increase in complexity and competitiveness, further exacerbating the trend described immediately above.

4. To improve the management of information source, there is a trend toward breaking organizations into "strategic units" to respond faster to library opportunities.

5. Library professionals understand more improved attitude toward the use and management of information source, effective service and better resource management. Thus, instead of IRM being "an ill disguised attempt to provide a sincere foraging data processing managers" (Connell, 1981b), it is more likely to be a powerful motivator for difficult but necessary change.

6. The consistent improvement in the price-performance of resource tends to accelerate the investment shift from human resources to capital investment for reducing operational costs and improving resource effectiveness.

B. **Rathswohl** also identified two Information Resource Management perspectives underlying the current thinking in Information Resource Management. One perspective stems from information source processing and management information systems traditions and another Perspective is based on information science traditions including library, communications, behavioural and social sciences.

Perspective 1

The first perspective views information as a manageable commodity or resource to be produced, distributed and disseminated, and used for purposeful needs. An information system is viewed as an identifiable set of operations for producing specific types of information products such as reports. The methodology of this perspective focuses on the technologies, skills, and management necessary to design and implement a system that meets certain a priori based technical standards. The theoretic perspective of this system is basically concerned with that of an improved dissemination of information source leading to an improved use of information source.

Guimaraes (1988) identified three kinds of Information Resource Management view and they are respectively

- Information Resource Management as the management of the library information resources,
- Information Resource Management as the management of library information system application development and improvement and

- Information Resource Management as the management of the organization's resources which used to produce information.

All three views of IRM seem to fall into this first perspective of emphasizing the technical aspects of information management.

Perspective 2

The second perspective underlying IRM focuses on the human use of information rather than on dissemination of information. This perspective emphasizes on information content, information transfer, and the interaction of users with information systems of all kinds. The focus is on the contextual factors, described in information terms, upon which human activity is contingent. The environment is not viewed as an information system per se but as a set of information arrangements. The methodology of this perspective focuses on the user's ability to cope with information arrangement in ways appropriately defined by the user. The perspective is basically concerned with the demand for information and presupposes that an improved articulation for the need for information leads to an improved use of information.

Lunin and **Cooper** argued (1988) that 'the convergence and integration of seemingly disparate fields and disciplines, and the raising of the collective consciousness of educators, practitioners, prospective student, and society in general to the importance of information and its transfer in all facets of professional and everyday life require primary consideration.

1.10 WORKING PATTERN OF INFORMATION RESOURCE MANAGEMENT CENTERS

In the current competitive world (Economic, Political), Library and Information Centers are able to identify the opportunities and assess the threats.

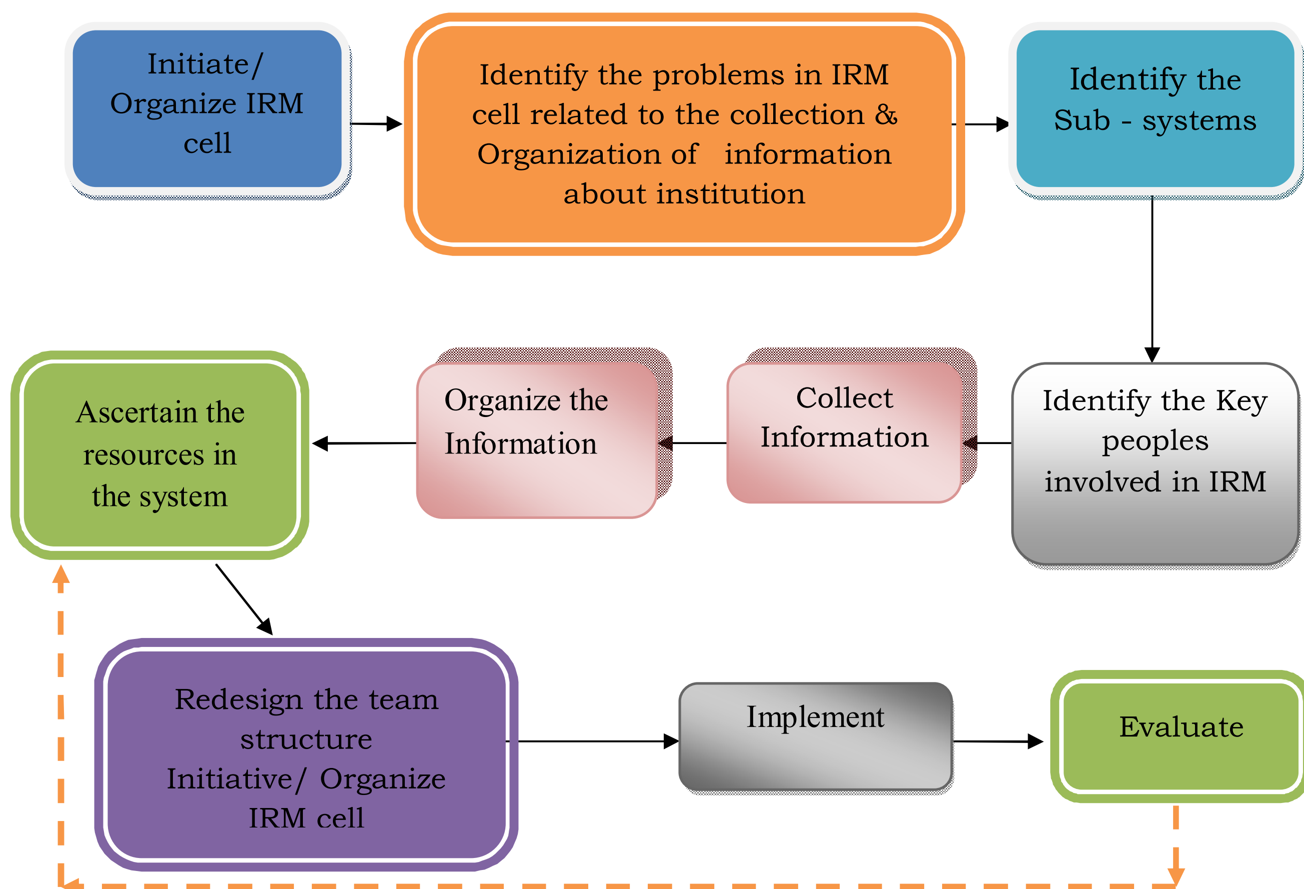


Figure 1.2 System Model of Information Resource Management

1.11 RESPONSIBILITY FOR INFORMATION RESOURCE MANAGEMENT

The successful implementation of Information Resource Management is the responsibility of the Librarian and assisted subordinate staff of the library. As with any resource, Librarian must ensure the availability of information source and information about users' needs. It is important to note that everyone (Management, User and Publisher) supports Information Resource Management, and that support can best be achieved when the concept is promoted by librarian effectively and efficiently.

1.12 THE ROLE OF IRM IN LIBRARY AND INFORMATION CENTRES

- The Information Resource Management strategic plan in libraries should focus on how information and technology will support the goals and objectives outlined by the library. IRM strategies must be creative and flexible to address the current needs and be potentially expanded to cater to the future needs of the users.

- Information Resource Management is an approach to library and information centres' planning that emphasizes on the importance of information as a valuable resource. It focuses on acquiring, processing and maintaining a balanced information sources, and IRM is viewed as a means to assist the library and library professionals to do things better, faster and at the lowest cost.

- "Information Resource Management" is the term used to describe the function that manages, organizes and coordinates the document profile and the user's profile so that it best supports library activities. In this context, information systems are considered to be the backbone of the valuable data resource, providing the means for the successful delivery of the services.

- An information system is a set of interacting components, e.g., information sources, human resources, financial sources, telecommunications, etc., with multiple interactions and relationships among them. Effective information management systems are the product of a carefully constructed Information Resource Management environment.

- Information Resource Management is being planned, designed and developed in the midst of many complex and conflicting priorities – library routines, total quality management, acquisitions and economic volatility. Information Resource Management provides the principles, parameters and standards that define the environment of library and information centres.

1.13 FACTORS FOR IMPLEMENTING AN IRM IN LIBRARIES

The following six factors are involved in the implementation of Information Resource Management in libraries.

1. Executive leadership and involvement

   Leadership and involvement of librarians are necessary for implementing Information Resource Management in libraries.

2. Formal Information Resource Management infrastructure (Ground Rules/ Controls)

   Library and information centers should have a clear cut framework of Information Resource Management, IRM Policies, IRM Standards, IRM Development Methodology and IRM Tools.

3. The Information Resource Management model

   The library professionals create various models of Information Resource Management like Functional Model, Organizational Model, Library source Location Model , Conceptual Data Model, Information source processing Model, Library service Model and Library Technology implementation Model for developing Information Resource Management.

4. Master implementation plan

   Library professionals are responsible for deciding all the details i.e. when, who and areas for implementing Information Resource Management plan in libraries.

5. Effective Information Resource Management organizational structure and transition plan

   Effective Organizational diagrams and Organization charters are required to implement Information Resource Management in libraries.

6. Appropriate skill base

Library professionals must develop skills related to managing information resources.

1.14 BENEFITS OF IMPLEMENTING IRM IN LIBRARIES

The benefits of implementing Information Resource Management in libraries are listed below.

- It is concerned with effective management and use of information sources,
- It helps to reuse information resources and eliminate redundancy of information resources,
- It helps to prepare complete and current documentation of all information resources in an organized and meaningful way,
- It helps to identify the gaps and duplication of information sources,
- It clarifies roles and responsibilities of librarians, Management, Users, Publishers and sellers,
- It saves costs in the procurement and handling of information sources,
- It identifies the cost benefits of different information resources,
- It actively supports management decision processes with quality information sources,
- It enables us to control information resources and perform effective impact analysis and
- It improves communication within the institution.

1.15 OPERATIONAL MEASURE OF IRM ATTAINMENT

The following characteristics help to measure Information Resource Management attainment in libraries.

- Increased specialization of library professionals to improve their effectiveness (and hopefully efficiency) which leads to the creation of mutually dependent specialty groups (sub-functions) within the libraries.
- Increased integration of IRM sub -functions to improve their individual and overall library performance.
- Library authorities accept information technology as a valuable library asset rather than a just expense.
- Authorities of colleges should accept, library as a service based organization.
- A centralized plan identifies how information needs can be satisfied through various services.
- The library has established and enforced policies and procedures concerning information resources.

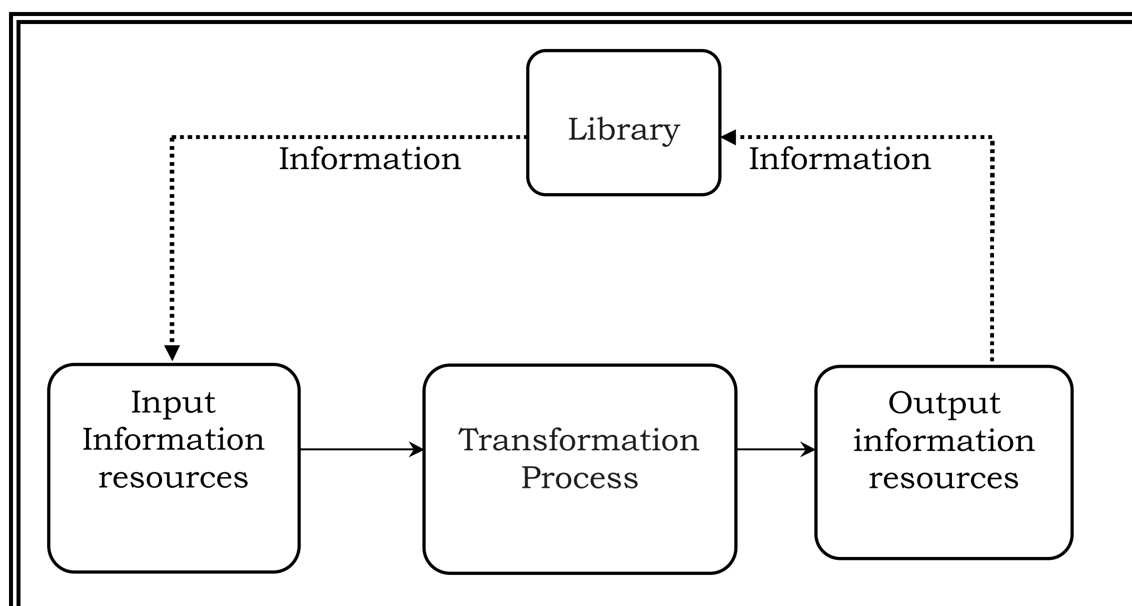


Figure1.3 System of Information Resource Flows

1.16 STATEMENT OF THE PROBLEM

Information Resource Management helps library and information centres for effective management and use of information resources and it is used for reuse of information resources and eliminates redundancy of information resource. It is necessary to analyse the present status of management of information resources in libraries. The researcher has chosen the research problem of "**Information Resource Management: An evaluative study of Libraries in Affiliated Colleges of Bharathidasan University, Tiruchirappalli".**

1.17 SIGNIFICANCE OF THE STUDY

In the knowledge context, libraries are service oriented organization and their services benefit the users directly (for example, consumable services such as book delivery, story readings, reference assistance) or indirectly (for example, service results of collection development, cataloguing and preservation).

- Information Resource Management helps to fulfill the information needs of the users and the mission of the library's parent organization and librarians should have a clear impression of their users' needs and their mission as the library clearly addresses such needs.
- It helps to manage information sources in the proper way and enable the users to utilize the managed information sources in an effective manner.
- Information Resource Management has been extensively done in the field of business, economics, technology and banking but in the field of library and information science it is rarely done.

- It is interesting to note that in Tamilnadu, no research has been done in the Information Resource Management. So the researcher has opted for this interesting study.

This study deals with management of information resources like information sources (Selection, Acquisition, Management), and human sources in Art and Science College Libraries affiliated to Bharathidasan University, in order to know the level of Information Resource Management skills possessed by the librarians. The study identifies the use of management of information sources by its users.

1.18 NEED FOR THE STUDY

Library and information centers are playing a vital role in providing library services to support and fulfill the educational needs of library users. It needs building up collection, management and dissemination of information sources. Questions are raised whether college libraries are managing information sources and providing adequate services to the users? Whether the users have utilized those resources and satisfied with services? To find out answers to these questions it was necessary to evaluate all aspects of Arts and Science College Libraries affiliated to Bharathidasan University. The purpose of this study includes: assessing the collection development in various Arts and Science College Libraries, knowing the status of human and financial resources available in libraries, identifying the current levels of library services provided in college libraries, evaluating the librarians attitude with reference to management of information resources and examining the users opinion related to the management of information resources in college libraries.

1.19 RESEARCH QUESTIONS

The researcher has proposed the following research questions to carry out the study.

1. What are the methods adopted and barriers encountered in acquiring and maintaining information sources?
2. What is the attitude of librarians towards providing library services?
3. What level of Information Resource Management skills are possessed by the librarians?
4. What are the criteria adopted to evaluate the use of library collection?
5. What level of satisfaction is attained by the users in using library resources?
6. How are the users using the various resources and supporting services?
7. What are the difficulties faced by the users in using the various library services provided by college libraries?

1.20 OBJECTIVES OF THE STUDY

The following objectives have been framed to carry out the study based on the research questions proposed.

Librarians

1. To find out the various book selection methods which are frequently used to acquire information sources in Arts and Science College libraries.
2. To analyse the various barriers encountered in acquiring information sources.
3. To study the attitude of librarians towards providing library services to their users.

4. To identify the difficulties encountered in maintaining information sources and various security measures used to secure the library resources by the librarians.

5. To analyse the various Information Resource Management skills possessed by the librarians.

6. To know the criteria adopted to evaluate the use of library collection.

Users

7. To identify the purpose of users in visiting the library.

8. To study the various information resources used by the users.

9. To know the level of satisfaction provided by library resources to the users.

10. To highlight the order of priority given to various resources and supporting services by the users.

11. To identify the difficulties encountered by users, which are related to various library services provided by the college libraries.

12. To design and develop strategic model of Information Resource management in libraries based on the findings of the study.

1.21 HYPOTHESES

The hypothesis is a tentative answer that is intended to be tested and critically evaluated (**Gravetter and Forzano, 2009**).On the basis of the objectives and the review of related literatures, the following hypotheses have been formulated for the present study.

Librarians:

01. There is no significant difference between location of the libraries and the modes of acquiring information sources.

02. There is a no significant difference between experience of librarians and the use of book selection tools.

03. There is a significant association between among Government, Government Aided and Self Financing College libraries in providing various library services.

04. There is significant difference between the experience of librarians and Information Resource Management skills possessed by librarians.

05. There is a significant relation between experience of librarians and mode of communication in acquiring information source.

Users:

06. There is no significant association between the type of institutional library users and their purpose of visit.

07. There is a significant difference based on the discipline and information sources used (usefulness) for their need.

08. There is a significant difference in satisfaction of library resources and facilities among the various discipline users.

09. There exists a significant difference in the difficulties encountered by the type of institutional library users and library services.

10. There is no association between the nativity of users and their importance in using various resources and supporting services.

1.22 CHAPTER SCHEME

The present study comprised the following six chapters.

The first chapter deals with general introduction about Information Resource Management followed by the statement of the problem, the significance of the study, the research questions and the objectives of the study.

The second chapter deals with the related concepts and related studies done with respect to the research problem.

The third chapter concentrates on methodology adopted in the study comprising of Research design, universe and sampling, pilot study, tools for data collection, statistical application of data, problems encountered by the researcher and the limitations of the study.

The fourth chapter presents the bird's eye view of Arts and Science Colleges affiliated to Bharathidasan University.

The fifth chapter focuses its attention on analysis and interpretation of the collected data.

The sixth chapter incorporates a discussion and the conclusion arrived at and offers suggestions to librarians for managing information resources and to users for utilizing information resources. This is followed by the bibliography and the appendix.

Environment, global issues, integration, technology, increased security and preservation risks, inadequate knowledge in information resources and role of library professionals are the critical issues in managing information resources. This chapter presents a novel and efficient Information Resource Management approach to the information society environment.

CHAPTER II

REVIEW OF LITERATURE

Literature reviews help to see the full picture and uncovering new evidence on relevant topic. It encourages objective thinking and systematic approach to the research undertaken. A literature review is a critical and indepth evaluation of previous research (**Kadli**).

Review of literature allows the researcher to understand the broader issues at stake, offers a chance of finding out what has or what has not been written on a given topic and provides the researcher with the opportunity to indicate where his work 'fits' in with the existing literature around the chosen topic and why it is worth undertaking the research in the light of this.

Review means to organize the knowledge of the specific area of research to evolve an edifice of knowledge to show that researcher's study would be an addition to that field. The task of review of literature is highly creative and tedious because the researcher has to synthesize the available knowledge of the field in a unique way to provide the rationale for his study.

The review of literature of this study has been focused on the following broad categories:

- Information Resource Management
- Information Sources
- Library Personnel
- Library Finance

- Library Service
- Librarian's skill
- Preservation of information sources
- Library Security

2.1 INFORMATION RESOURCE MANAGEMENT (IRM)

The planning, organization, allocation and utilization of information and related resources through legal, technological and other methods to support institutional goals and missions is Information Resource Management (**Lai,** 2010).

Martin and Zaghloul (2011) examined the work of librarians who manage information resources at the University of Arizona Libraries to inform the development of a set of core competencies. The planned implementation and assessment of a series of training sessions for developing these competencies is also discussed, as is the role of individual librarians who had been assigned specific tasks related to broader issues not easily addressed by a training session. Finally, a prioritized list of mastery-level competencies for future development was defined. By defining in detail the information resource-related tasks for which Information Resource Management members were responsible, the authors were able to develop a plan for training modules that are designed to ensure core competencies for all team members. This paper was a detailed plan for developing competencies needed to manage information resources at an academic library.

Sun and Cheng (2011) bridged out organization information resources that are inimitable and valuable could be quite important. The paper reviewed the present research situation on organization information resource management, and makes a

detailed exploration of kingdee, Ufida. The authors put forward a unified approach of three-dimensional management methodology for analysis and comparison of kingdee, Ufida, SAP. In the end, the paper made an analysis on the above framework in the perspective of management organizations, information structure, and information systems framework.

Williams, Eaton and Breininger (2011) discussed the value of information in a context of adaptive management, in which actions were taken sequentially over a timeframe and both future resource conditions and residual uncertainties about resource responses are taken into account. Authors described several measures of the value of information, with each based on management objectives that are appropriate for adaptive management. Accounting for the value of information would help to inform decisions about whether and how much to monitor resource conditions through time.

Amitava (2010) noted that organizations need to maintain their digital knowledge base in a controlled environment with provisions for conditional access. Along with its trademark efficiency of use, digital information resource management brings potential security concerns which need to be systematically apprehended and addressed. Creation and implementation of information security policies are essential to combat these vulnerabilities.

Haibo (2010) proposed a framework that could be used to scope management of information resources in e-government and investigated its relation with objectives of information resources management. The structural elements of the framework included analyzing the complexity and uncertainty of information resources in e-government, mode of adaptive management, environment of adaptive management, and

platform of adaptive management. A reference framework for better management of information resources in e-government was provided.

Huang and Sun (2009) noted that virtual organization had some especial features such as resource dispersing, member diversity, organization dynamics and flexibility and so on, information resources management of it has much more difficulties. According to the features of Library, the model of a distributed information resources management system based on mobile agents had been designed, and the model of mobile agent is discussed in detail.

Ning (2008) represented was first a helpful attempt in studying visualization model of general information resources management with certain experience achieved, and secondly, it also explored a road to success in terms of visualization of information in Chinese. This article discussed a theoretical method of information visualization system and its corresponding technologies. The system was the result of the project (70473068) supported by the National Natural Science Foundation of China. The paper specifically discussed constructing strategy of visualization model, environmental configuration, functional module and operation method of prototype system.

Sheng-li (2008) discussed professional education theory advancement of information resource management. With remarks on the content, method features and technology of information resource management, it analyzed the influence that information technology had on information resource management.

Khosrow-Pour (2007) studied how information resources management became increasingly dependent on emerging technologies to combat its challenges and decipher its effective strategies, the demand for building a critical mass of research in this area.

Innovative Technologies for Information Resources Management bridged together compelling content related to the continually emerging technologies in areas of information systems such as web services,, distance learning, process management, and software development and software applied. Focusing on the implications innovative technologies had on the managerial and organizational aspects of information resources management, this article provided academicians and practitioners with a requisite and enlightening reference source.

Tarafdar and Gordon (2007) explored how information system (IS) competencies affected process innovation in an organization through Information Resource Management. Data were collected through a case study of two process innovations at a healthcare firm in the United States. The findings illustrated how six information system competencies – Knowledge Management, Collaboration, Project Management, Ambidexterity, IT/Innovation Governance, Business-IS Linkages – can differentially affect the conception, development and implementation of process innovations. Implications for researchers and practitioners were drawn from these conclusions and suggestions for further research are proposed.

Hu (2006) concentrated on information grid and it was made up of autonomous systems linked together by a network technology substrate. Based on the Agent-Based Information Resource Management Model (ABIRMM), he advanced a novel Market-Based information resource management approach, MBIRMA for short. It developed a market model to predict performance. Agents, who were created to receive consumers' requests and preferences, make the information services plan correspondingly and bid for required information resources through hybrid auction. And utility function depicts consumers' preference under the direction of the global information management. The

working mechanisms and the information resource management approach of the model were thoroughly illustrated.

Chalekian (2005) explored the relationship between state-level centralized information resource management organizations and budget periodicity. The presence or absence of agencies that coordinate agency information technology activities was correlated against those that budget annually or biennially. Using a Chi-Square matrix, the expected vs. observed cells prove to be statistically significant. This implied that some degree of relationship exists and that the two variables were not independent.

Gangatharan (2004) found out the relevant one among the misleading information was considered as a small needle in the haystack. Information resources management was "management of the resources concerned with the system support and the servicing of information for an organization". The key to Information management was "improving the quality and provide reliable information". Information resources had different components such as information content, information technology, information related personnel, and information-related facilities. Information management strategy involves identification, ownership, cost and value, development and exploitation. Information resource is available now on various products and services. This paper dealt with the strategies of managing the vast multitude of information resources, and its importance, benefits and makes the users realize the need of information management skills in this age of information explosion.

Christozov (2003) discussed the use of real lives case, based on students' experience, in training for the Information Resources Management (IRM). Two groups of students, trained under the two paradigms, were selected, and their performances,

after graduation, were compared. Assessment shown that in given circumstances (transition from centrally planning to market-oriented economy, small enterprises, and underdeveloped information infrastructure), the use or real live cases offered by the students allows training to be kept relevant to the practices.

Kangas (2003) explored the strategic formulations based on the resource-based view of the institution, as well as its implications to organizational learning and competitive advantage created by information resources management. The conclusions suggested that the resource-based view of the institution, and its implications to strategic management and information resources management, form a solid base for further studies on the foundations of the digital economy. Therefore, the paper suggested that studies of the digital economy could be more fruitful, when studied under the premises of the resource-based theory, than any other modern theory of the institution.

Law (2002) presented issues and challenges in information resources management, followed by challenges in information resources development. The capital investment for information technology remains as a major challenge and management must overcome organizational inertia and the general deficiency in information literacy. The University of Guam began the investment on a campus-wide information system in the early 1990. However, there is still a lack of planning data after one decade of technological development, and information resource management is still a new concept to administrators.

Dias (2001) described the improvements in information management, going through different stages—from physical control of information containers to corporate

portals. This paper presented definitions, concepts, main components of corporate portal architecture, and different kinds of corporate portals found in specialized literature through Information Resource Management. The author also pointed out the potential benefits of this information resource management with technology to organization.

Moody (2000) described a survey instrument, which was used as part of developing an Information Management Strategy for one of Australia's largest organizations. The instrument measures levels of information support of information users across the organization using a set of Information Health Indicators. Use of the instrument enabled much wider consultation than would otherwise been possible, and provided a quantitative basis for developing recommendations. While the instrument proved useful in this particular case, it also provided the starting point for developing a general purpose tool to support Information Resource Management practice.

Sprehe (2000) presented several key issues facing federal agencies with regards to records management practices. The article identified selected management, technology, implementation, and definitional barriers that agencies encounter when considering how to create and maintain record management process based on the concept of Information Resource Management. A key question for federal agency technology managers was: If an organization creates and manages virtually all of its information in an automated information technology systems environment. Based on research conducted by the author, the article reviewed various federal agency electronic records management processes and the implications for those practices.

Lesjak (1999) described the implementation of an Information Resources Management at the School of Business and Economics, University of Maribor, Slovenia. The aim of the course was to provide students with knowledge and experience to deal with information technology in organization from a managerial perspective. The theoretical and practical part of the Information Resource Management study was conducted. Thus students had an opportunity to compare, combine and verify "theory" and "practice" instantly and develop capability to transfer the acquired knowledge and skills into practice.

Caudle (1996) highlighted six fundamental information resources management practices in successful organizations that can improve government service delivery performance.

Lewis, Snyder and Rainer (1995) focused on the concept of information resource management construct as a comprehensive approach to planning, organizing, budgeting, directing, monitoring, and controlling the people, funding, technologies and activities associated with acquiring, storing, processing, and distributing data to meet an organization need for the benefit of the entire organizations. Eight dimensions underlying the Information Resource Management construct were found via exploratory factor analysis i.e. chief information officer, planning, security, technology integration, advisory committees, enterprise model, information integration, and data administration. The instrument served two functions: (1) to create a coherent, theoretical foundation for further research on the Information Resource Management construct, and (2) to provide reference norms for practicing managers to use and assess the extent of Information Resource Management implementation in their organizations.

Chepaitis (1994) conducted a study about the development of information resource management in Russia. Working in the Kuzbass region of Siberia, the author founded that the absence of broad economic and managerial reform also blocks effective information resource management. Ironically, many models that have been used for information systems transfer is applicable in Russia.

Hernon (1994) article provided the first in-depth analysis of the information life cycle, traces that concept in policy instruments and the primary and secondary literature based on Information Resource Management. The information life cycle, however, could contribute to the management of information resources as well as to the study of government information policy. The article outlined the stages of the information life cycle and encourages further discussion, analysis, and standardization of a concept that should be evolving, not be static.

Cheng and Kanabar (1992) provided an overview of key information resource management (IRM) concepts. The discussion focused on three areas: planning for the acquisition, organizing, and control of information resources in an organization. They offer some guidelines, on the basis of their own experience and existing literature, as to how these issues could be resolved. Finally, any new IRM initiative had to consider the changing role of computing technology and its practice. Therefore, a separate section had been researched into to provide details of the new technology of the 1990's and its influence over all aspects of information resource management.

Rathswohl (1990) suggested that the concept of Information Resource Management (IRM) should be focused more on end-user concerns rather than information technology per se. IRM should develop and support IRM education for

end-users emphasizing the cognitive skills required for effectively utilizing information resources. IRM should also consider adapting the concept of 'information counseling' as a guide to improving the interface between end-users and information resources.

Brussaard (1988) conducted a study on the term "Information Resource Management (IRM) that was used in many different ways, while in the field of public administration. With its use, one may establish a picture of information resource management in the public sector. This classification system was used in the Netherlands to formulate policy on information systems and services for central, regional and local government in a more or less coordinated way. It might also be of practical value for comparative studies of different countries. The major conclusion was that the structure of a country's public administration had always implicitly been dependent, inter alia, on the information technology available. It followed that all other things being equal, new information technologies would influence public sector organization and its relations with society as a whole.

Ein-Dor and Segev (1988) study encompassed 108 users in 21 organizations. The major findings in the data presented here were that the extent of EUC is closely associated with organizational size, information resources, top management use, and users' needs. Four hypotheses of organizational factors affecting the extent of end user computing (EUC) were investigated by means of a field study. A model was presented integrating these factors within a framework of organizational information resources.

Guimaraes (1988) classified the information resource management literature into three different groups. The term "Information Resource Management" had been used for many years in different contexts and with different meanings. Each group has

a different view of IRM: the management of information resources, the management of systems development, and the management of the resources used to produce information. The author argued in favour of the last view of information resource management.

Tricker (1988) research was used as the basis for developing insights into the cultural aspects of information on Chinese business methods. Cultural implications in the design of Information Systems (IS) and Decision Support Systems are developed in information resource management environment. The classical paradigms of IS studies were rooted in Western thought. Cultural differences needed to be recognized in IS design: methodologies of design need a cultural dimension.

Gruber (1983) traced the next stage in the management of decision support systems, whereby both information processing, or the information systems function, and the user share the responsibility for decision support as a team. This new integration of the information systems function and users provided an extraordinary improvement in the effectiveness of decision support via the sharing of data and modeling, the integration of decision makers' and corporate functions and the teaming of information systems professionals knowledgeable in the technology with users who are experts in the management of the organization. A case study demonstrates the effectiveness of this integration among information systems and the users and the management of organization decision support services.

Wood (1983) explained the concepts underlying information resource management, how they were applied to the information security area, and what general information systems benefits can be obtained. In a more specifically security-oriented

sense, it indicated how information resource management could help address a few of the pressing problems now encountered by information security practitioners: controls sub optimization, the Maginot Line syndrome, top management understanding and support, disaster recovery planning, security policy-making, consideration of non computerized information, and expeditious resolution of security problems.

Selig (1982) investigated that as the resources, scope, and criticality of the "information commodity" grow, more senior managers were being forced to concentrate on better ways of planning for rapid changes to capitalize on new opportunities and reduce their risks. The conclusions and recommendations presented in this article were based on an examination of the actual Information Resource Management (IRM) planning and coordination practices of 25 large multinational corporations as well as an in depth review of two case studies.

Meyer (1981) pointed out the 1970's as the term “Information Resource Management” that accurately described the methodology used for managing an organization’s information resource. With the expansion of data independence to include non database files, where information manager productivity was becoming a real issue and the approach of distributed systems and databases was imminent, a standard information resource management tool was an absolute requirement. Current efforts to develop an Information Resource Dictionary System (IRDS) standard would be discussed with some ideas on the directions being taken.

Schrage, et al (1981) focused on concept of Information Resource Management (IRM) which would be defined with reference to available resources written on the topic. The professional society which had emerged from the resource management area

will also be described. Discussion initiated on the relevance to the IRM with details on how implementations of concepts had been done on both the graduate and undergraduate levels. A specific example of IRM training would be presented with an overview of how the material was applied in other educational settings.

2.1.1 Information Resource Management Model

Han et al (2011) noted that Information Resources Management (IRM) was an emerging discipline that helped managers assess and exploit their information assets for organization development. It was drawn on the techniques of information science (libraries) and information systems (IT related) as well as the process of business management. In this paper, they proposed an event-driven interactive IRM model to effectively provide managers with valuable information and background processes to keep the valuable information. The structure of the proposed model was described, components and processes of the model and interactions between them were presented, and the benefits and obstacles of the model were analyzed.

Afshari and Khosravi (2009) proposed a framework for information resource management maturity model (IRM3) that includes ten best practices for the maturity assessment of the organizations' IRM. Maturity model was an area of interest that contributes organizations to find out where they are in a specific knowledge area and how to improve it. As Information Resource Management (IRM) was the concept and that information is a major resource, it must be managed using the same basic principles that were used to manage other assets, assessment of the current IRM status revealed the improvement points that can play a critical role in developing an appropriate information structure in organizations.

Virkus (2009) revealed organizations as knowledge-based social systems were much more recent, and really gained momentum only within the last decade or so. The study of the World Wide Web as information and communication media was younger still, but had generated tremendous excitement, partly because it has the potential to reconfigure the ways in which people seek information and use knowledge, and partly because it offered new methods of analyzing and measuring how in fact such information and knowledge work get done.

Feng (2008) studied the substance of information resource management challenges on mismatches was clarified, and a dual loop model was designed to deal with the issue on mismatches. To manage implemented information resources successfully in practice, one great challenge facing the management team was how to deal with various mismatches between information provider and information user. The contribution of this paper would be twofold: one was to set up a sound management mechanism for promoting information resources management, the other one was to create adaptable information resources in practice.

Zhang (2003) described the analysis, design and implementation of the network information resource management system (NIRMS), which uses distributed modes of content management to collect information resource on the Internet for Chinese patrons. The first two sections described the architecture and framework of the NIRMS and the network resources management metadata (NRMM) schema. Then the modules for resource inspection and evaluation, knowledge mining and users' information feedback were discussed.

O'brien and Morgan (1991) studied on management of the information systems function, especially as represented by the information resource management concept and they studied growth of its importance in today's organizations. Developments in IS technology, end user applications, and the strategic use of information systems are driving a search for better ways to use and manage the information system resources of an organization. This paper explored some of the developments shaping the information resource management concept, various views of information resource management, and some of the research which revealed industry perceptions of information resource management.

2.2 INFORMATION SOURCES

An organization or person from which information is obtained is information source (**McGill and Dixon, 2005**). The source from where information is obtained by members of the community such as relatives, friends, government officers, teachers, community leaders, outside visitors and grapevine (**Gnaniah et al, 2005**).The sources where from we get information are information sources. These sources comprise documents, institutions, organisations, and human beings.

Lata and Sharma (2013) attempted to know the usage of information sources and services by the T. S. Central State Library of Chandigarh users. A questionnaire was used to identify the impressions of users towards the use and awareness of library services, adequacy of library resources and their views on library services. This paper also examined the satisfaction levels of users about the library collection.

Venkatesh and Aravinthan (2013) elaborated on how technological innovations had led to the improved information management and library services. A

survey had been conducted to know the changes in the information-seeking behaviour and needs of the medical professionals and librarians in this era of "E". Increase in the demand of E-resources by the users as well as librarians have been observed with the growth of knowledge to use these resources. Provision of E-resources had shown a rapid growth in research. This information explosion, increasing needs of users, lack of self sufficiency and financial crunch had led to the formation of consortia all over the world.

Deval (2012) highlighted some of the facts associated with the use and assessment of digital information resources and focuses on the usefulness of digital information resource collection for the university library. Therefore, it was very important from the point of view of guiding the administrator of the library, in developing and maintaining the collection of digital information resources.

Nguyen (2012) summarized the data sources as succinct synopses for the rapid filtering of non-promising sources. He maintained both structural and value distribution information of each data source, and proposed a novel ranking function to measure effectively the relevance of the data source to the given query. He conducted experiments with real datasets, and results show that our approach achieves high performances in all evaluation metrics: recall, precision and Spearman's rank correlation coefficient with different experimental parameters.

Palmer, Stuart (2012) presented the development and application of a new methodology incorporating both quantitative and qualitative profiling to help discern the characteristics of units of study that are the differentiators of student ratings of

library resource quality This finding suggested potential areas for intervention to enhance student perceptions of the quality of library resources.

Sandhu and Jalandhar (2012) presented the results of a survey that assessed engineering students' familiarity with use of open access resources in Punjab (India). The survey was made through questionnaires and completed by 460 respondents. Respondents were generally familiar with open access sources including open access journals, institutional repositories and self-archived materials on the web. Respondents' attitudes toward open access varied, but most agreed that open access resources were of high quality and that open access would benefit them. In helping researchers found open access information, more respondents had used open access journals than institutional repositories or self-archived materials. Some of the challenges faced by the student fraternity in accessing these resources had been enlisted and appropriate recommendations had also been given.

Kim and Sin (2011) investigated undergraduates' source selection behaviour: what sources they use frequently, what criteria they consider important for source selection, how they perceived different sources, and whether their source selection behaviour was related to what they know about selection criteria. The study found discrepancies between what students know and what they do regarding source selection. Spearman's rank correlation results imply that participants did not apply the criteria they considered important (e.g. accuracy, currency) frequently when selecting sources. Suggestions were made to refine information literacy programmes to support the selection of quality sources.

Ogunniyi, Adeniji and Jato (2011) studied about the availability of library resources and services to students in six selected private secondary schools in Ondo West Local Government Area of Ondo State. The findings revealed among others that all sampled schools had libraries and textbooks were the major resources in the school libraries. Virtually all the respondents made use of the school library.

Oshilalu (2011) called on librarians to embrace the emergence of electronic library resources as a development that was capable of increasing their productivity rather than perceiving it as any form of threat. The work examined some ways through which electronic library resources could appear in the form of a threat to Librarians. The article urged the librarians to rise up to the task of getting the best out of the existence of electronic library resources and the article affirmed that the emergence of electronic library resources was a true reflection that the library is a growing organism and the emergence of this set of library materials was one of the growths expected from a library that was committed to meeting the users' information needs within the shortest possible means of all types.

Ossai (2011) studied a case study of how undergraduate law students of University of Benin, Benin City made use of information resources. The objective of the study was to understand how male and female law undergraduate students acquire their information, the resources employed and to what purpose the information was sought. The sample consisted of 230 undergraduate law students randomly selected from the first to fifth year of study. The study founded that there was only a slight difference in how male and female undergraduate law students used information resources and that the need to compliment lecture notes ranks highest in the information need of the students. The study recommended formal training in the use of

information resources will significantly improve the pattern of both information use and search.

Owolabi (2011) investigated the use of electronic information source among faculty members in Nigerian universities .Simple random technique was used to select one thousand and four hundred faculty members from the four universities in the country. The findings revealed that majority of the faculty members were using the electronic information sources, mostly for research purposes. Recommendations were basically that university managements should provide electronic information sources in all arms of the universities and the need for adequate funding for the development of electronic information sources in all the universities in the country.

Rupinder Singh (2011) studied with the Information sources and services in the era of globalisation. The help of ICT digital libraries and institutional repositories are available at the click of the mouse. The paper also discussed with the open source software for the development of institutional repositories such as Greenstone, Dspace, Fedora and Eprints Archive Software which were easily and freely available for the help of library professionals and end users.

Tyagi (2011) sought to study the user awareness and perception of using different types of electronic information resources by the faculty, research scholars, postgraduate students and undergraduate students to analyze the different purposes for which the Electronic Information System (EIS) is used by the respondents and to assess current user characteristics associated with use of online resources and databases at the IIT Roorkee Library. A total of 400 questionnaires were distributed to the selected sample for the year 2010-11; 387 valid samples were collected and analyzed.The

survey showed that majority of respondents marked that library possessed useful online journals and databases. Awareness among the users about the availability of online journals was found highly satisfactory. Online journals were mostly used for research needs

Chopra and Gurmeet Singh (2010) surveyed resources and services of Government Polytechnic College Library, Amritsar, as a case study. The study identified the nature of library collection and its services and evaluated the existing resources available for library users. Apart from books, it had Videos and CDs which were highly used by the students and the staffs. Reference and photocopy services were provided. The users were satisfied with its services.

Hall (2010) discussed how collaboration between institutions, especially smaller collections, could result in increased access to materials and specialist staff for researchers and students. Preliminary findings suggest that collaboration helps smaller collections to assist their primary customer base and supports the achievement of greater outcomes than would be the case if each operated independently.

Kattimani (2010) revealed the quality consciousness regarding the information resources among the library users who used the internet. Internet and online resources provided access to a variety of information ranging from primary to tertiary sources. Quality awareness among the users was necessary for the value-added information and research. Moreover, accessibility, format, style, and arrangement of the online information resources were different from the conventional sources. Hence, users were expected to adopt different approach to access and use the online sources.

Parvathamma and Shanker (2010) surveyed the use of information resources and services in Nine branch libraries located in taluk headquarters in Gulbarga district, Karnataka State were selected and 50 questionnaires were distributed in each library under study. Out of 450 questionnaires distributed, 259 users responded (57.7%). The main purpose of the study was to evaluate effectiveness of public libraries from users' point of view. The results clearly indicated the need for public libraries to strengthen their document collection and create a better ambience to attract more users from all age groups and gender. More trained personnel were necessary to manage the document collection efficiently and offer innovative library services.

Bin (2009) provided strong evidence that the key to understanding how task characteristics affect information source use and reconciling the disagreements between the least effort principle and the quality-driven perspective was to examine the moderating effects of task characteristics on information seeking behaviour, and take into account the potential substitution effect between internal and external sources in information seeking.

Kumar and Rajkumar Singh (2009) examined the use of services by the users of National Science Library (NSL), New Delhi, India. 120 questionnaires were distributed among the NSL users and 108 filed were received back. The present study demonstrated and elaborated various aspects of NSL collections used within the available resources, frequency and purposes of visit, user satisfaction within NSL services and information about documents. Further attempt had also been made to highlight the findings of the study and a few suggestions had been given based on the analysis of data.

Adekanmbi and Boadi (2008) examined the problems militating against the development of useful library collections for the Botswana colleges of education students and lecturers. The study revealed the following as some of the major problems militating against collection development in the libraries: lack of constant training for the librarians, inadequate staff for the libraries, lack of administrative support, and unavailability and non-use of collection development policies. The study concluded that, among others, there was the need to train the college librarians on collection development, provide more staff for the libraries, and there was the need also for the librarians to produce and use adequate collection development policies.

Sakalaki, Maria and Kazi (2008) framed hypotheses and they were: (a) potential sellers will underestimate information's value compared to that of material goods; (b) when potential buyers' involvement is high (that is high investment and high risk), sellers will demand even lower prices for information; (c) some important current functions and meanings of information are not assimilated in social representations of information; (d) by contrast, participants must overvalue the remuneration of professionals producing pure information (invention) compared to those who apply this information to produce material goods. An experimental study confirmed hypotheses (a) and (b). A second study to investigate the structure of information's social representations showed that the representation's central core is mainly composed of categories referring to traditional media, functions and technologies; contemporary functions and technologies are less frequent or absent. A third experimental study confirmed hypothesis (d).

Ugah (2008) looked at availability and accessibility as variables in information seeking and use. Availability of information resources must be distinguished from

accessibility. Availability of information sources means ensuring their presence in libraries for immediate use (Aguolu and Aguolu 2002). Learning materials might be available, i.e., the library had acquired them, but inaccessible to those who need those for whatever reason (uncatalogued, miscataloged, misshelved, etc.). Accessible means that users could identify and use the resources. Both variables had a relationship with the use of library resources.

Warwick et al (2008) discussed the results of the Log Analysis of Resources in the Arts and Humanities (LAIRAH) study. It aimed to concentrate upon the use and importance of information resources, physical research centres and digital finding aids in scholarly research. The university library website was considered to be the most important resource, even compared to Google. Secondary finding aids and reference resources were considered more important than primary research resources, especially those produced by other scholars, whose output was less trusted than publications produced by commercial organisations, libraries, archives and museums.

Zimmer, Henry and Butler (2008) argued that knowledge is an important organizational resource and little research had investigated where individuals went to search for information or knowledge. It is important to understand how individuals perceive the wide array of sources available to them and how those perceptions affect their use of different types of sources and looked at factors underlying the selection of sources that require direct interpersonal contact (relational sources) and those that do not (non-relational sources) and explored factors that differentially affect the use of these types of sources. A sample of 204 working professionals recruited from graduate holders was used to test hypotheses regarding the effects of accessibility and quality, as well as comparisons and trade-offs between relational and non-relational.

Manjunathr and Mallinath (2007) evaluated the use of library facilities and information resources in First Grade Colleges in Shimoga District (Karnataka). A survey of 400 faculty members from thirty degree colleges in Shimoga district was conducted through a questionnaire. The collected data covered the use of library resources, services, viz, reference services, interlibrary loan, photocopying services, etc., classification and cataloguing and physical facilities provided by the college authorities. They concluded that the main intention for the use of libraries had been the academic interest of the faculty.

Stephenson and Sage (2007) provided an overview of perspectives associated with information and knowledge resource management in systems engineering and systems management in accomplishing enterprise resource planning for enhanced innovation and productivity. Accordingly, they discussed economic concepts involving information and knowledge, and the important role of network effects and path dependencies in influencing enterprise transformation through enterprise resource planning.

Widen-Wulff and Suomi (2007) worked out a method on how information resources in organizations could be turned into a knowledge sharing (KS) information culture, which can further feed business success. This process was complicated, and the value chain could be broken in many places. This study was viewed in the light of resource-based theory. A KS-model was developed where the hard information resources of time, people and computers were defined. KS was an interactive process where organizations must work on both hard information resources, the basic cornerstones of any knowledge sharing, and made constant investment into soft

information resources, learning, intellectual capital and process design in order to manage their information resources effectively.

Iqbalahmad, Christina and Karisiddappa (2006) studied the mode of approach in sharing and using the information resources available in LIS Centers through consortia. It also attempted to give different types of consortia initiatives in India and abroad highlighting the advantages of consortia. Very dynamic and ever improving consortia called FORSA Consortium had been taken as a case study and its developments, services, salient features and future plans are described for using of information sources. The review of this consortium from the usage statistics was attempted for continuation.

Souren, Saunders and Haseman (2005) explored the impact of information acquisition on perceived decision quality and on the time required to reach a decision on a fuzzy task. They found that the proportion of information accessed in the first part of the meeting was related significantly to the time required to make the decision. More specifically, when most information was accessed in the first part of the decision-making session, the relationship between decision time and amount of information accessed in the early part of the meeting was positive and linear. However, a curvilinear relationship was found between decision time and amount of information.

2.3 LIBRARY PERSONNEL

People employed in an organization or engaged in an organized undertaking such as service: many of the personnel involved require training. Library and information professionals mean those professionals who are engaged in library and information activities as a paid occupation (**IGNOU study Material**).

Jana and Panigrahi (2010) identified the causes of poor motivation towards work and suggests motivating parameters for non-government college librarians in West Bengal. The study was carried out on the basis of a survey conducted among 200 non-government college librarians. Found that many prevalent factors like status, salary, service conditions, recruitment and promotional policy and managerial relations, etc. are responsible for poor motivation. It was suggested that authorities should have in place various motivating factors in order to have motivated non-government college librarians who could provide their best services.

Montelongo et al. (2010) enhanced the college librarian's teaching, research, and collection development practices. Through such research, college librarians elevated their personal status among their nonlibrary colleagues and students, as well as the prestige of their library and the library profession. Suggestions for managing traditional librarian duties and pursuing a non library research agenda were included.

Oakleaf and Owen (2010) discussed tactics for improving library instruction and increasing levels of academic achievement among first year college students through collaboration between teacher-librarians and academic librarians. The research abilities of incoming college freshmen, the expectations of college instructors, and the impact on 21st century skills instruction were discussed. Particular focus was given to the benefits for college-bound students of developing partnerships between academic librarians and teacher-librarians.

Panigrai and Jana (2010) identified both satisfying and dissatisfying factors of Non-Government College Librarians in West Bengal. A self-designed Questionnaire containing work environment factors, basic need factors, and physical nature of work

was administered on the target group of 200 non-govt. college librarians out of a total of 275. Respondents expressed their dissatisfaction on some of the relevant issues. It suggested that the college authorities should be sympathetic to remove the factors of dissatisfaction for better library services towards its user community.

Powers (2010) revealed that the nature of reference service required of college librarians in California, limitations on budget, staffing, technical support, resources, decision-making ability, and professional development opportunities, affect their professional attitudes. Librarians saw reference service as primarily a teaching role. They experience “librarian's anxiety” when their teaching effectiveness is eroded, and satisfaction when their role is fulfilled. Librarians want clarification of practical uses of Web 2.0 applications. Community college librarians need better ways to articulate their teaching role to their institutions at large.

Rita Singh and Sharma (2010) analyzed about how future library profession has many challenges, and schools of library and information science need to build a wide range of information related careers to library science graduates. In implementing an automated system in an advanced pharmaceutical library, it is essential to recruit the library staff and professionals having skills in computer operation. Professionals engaged in the information transfer process require up-to-date knowledge and skills for which continuous education and training facilities are required. Computer and information literacy undoubtedly would result in a huge demand for fast, flexible and easily accessible information services.

Applegate (2009) analyzed data on 1,904 academic libraries, 334 unionized, to explore whether there was a relationship between a librarian-union presence and

several quantitative values such as student-librarian ratios, percentage of institutional budget devoted to libraries, average spending on salaries per librarian, percentage of library budget devoted to librarians, percentage of library staff who are librarians, and percentage of library budget devoted to staff salaries. Results showed that compared to librarians at either private or nonunionized public colleges and universities, librarians at unionized public institutions were somewhat better off. Librarians at public institutions were generally better paid but had worse working conditions--higher student-to-librarian ratios and fewer resources for collections. All institutions except associates-level institutions receive roughly the same percentage of institutional budgets.

Antonesa (2007) examined the professional identity of the college librarian in the 21st century and looks at the challenges that librarians and staff will face in their efforts to support learning. It was observed that libraries require staff that can market, promote and teach library users how to optimize their use of library of resources. An analysis of literature and job advertisements reveals that teaching and learning support are being discussed, including professional identity. It was pointed out that despite the changes, the library will remain important, no matter what forms it will take.

Dinesh and Nikain (2007) surveyed the librarians of engineering colleges in Karnataka on strategies. It reported the results of the opinions of the librarians regarding the strategies for location of libraries, factors influencing their use, effective management of library and information centre, to meet the goals and objectives, to integrate and coordinate the diverse activities of libraries, to become a part of engineering college library network. The results of the study were reported using statistical techniques.

Soutter (2007) described publishing trends in academic librarian competency articles to provide context for a later investigation of definitions found in this library and information science (LIS) literature. The majority of articles on education and continuing professional development were written by authors at library schools. The authors who wrote articles on professional issues were almost equally split between library schools and libraries. The majority of citations of peer-reviewed literature (53%) were to journals with no LIS subject heading in Ulrich's, illustrating that authors are incorporating literatures from outside LIS.

Ally Sornam and Muruganantham (2006) studied the adjustmental problems faced by college librarians in Tamil Nadu. The study used an Adjustment inventory scale and found out that college librarians have a moderate level of adjustment problems. The study had also found out that the variables, sex, marital status and experience have significant association with adjustment problems.

Bolger and Smith (2006) determined a correlation between the personnel status of librarians and overall institutional quality. Based on the responses of the 125 colleges that participated in the survey, the less likely that librarians would have faculty status or rank, the less likely they would be required to undergo a formal review process, the less likely they will have access to research funds, and the less likely they will be eligible to serve on campus wide faculty committees. Specifically, colleges in the top tier of the U.S. News and World Report rankings were almost seven times less likely to afford librarians faculty status and sixteen times less likely to afford faculty rank than those in the fourth tier.

Malanchuk and Ochoa (2005) presented information on how academic librarians could hold a literacy outreach program for the youth. Since literacy referred to the activity linked with the reading and handling of books and information, the program should teach all aspects of literacy to the users. Since academic librarians had a keen awareness of the cultural and educational needs of their community, they were well qualified to participate in the programs.

2.4 LIBRARY FINANCE

A budget is a guide or directive for fiscal management. **Fletcher** (1990) gave definition of a budget, calling it "the overall picture of … allocations (for expenditure) and … income," as well as "the financial allocation for specific purpose or purposes during a given period." Although libraries are service-oriented and have little or no revenue-generating motives or objectives, they still obviously require a budget.

Collins (2012) addressed some of the important actions taken by librarians, publishers and vendors to cope with changes forced by both the economy and budget pressures, by the continued migration of scholarly resources to electronic formats, and by current and planned e-book activities and models. It explored a pattern in library content selection and spending trends, publisher prices and pricing models, as well as vendor strategies and challenges.

Kont, Kollist and Jantson (2012) discussed the financing of Estonian research libraries since 2002, focusing primarily on acquisitions. The libraries' main funding source was the national government; thus, their fortunes were tied to the broader economy. Libraries were especially concerned about paying for electronic resources, given their importance and high cost. The Ministry of Education and Research's E-

teadusinfo program, begun in 2009, sought to establish a digital research information system by subsidizing the purchase of electronic material. Upcoming changes in the legal deposit law, if they included reducing the number of copies required, are likely to affect library acquisitions negatively.

Noh (2012) investigated the correlation between university libraries and academic research achievement and analyzed if university library resources correlate with academic research achievement. This study confirmed that labour and budget, investment in sources and an investment in university libraries enhance academic research achievement. This study was the first including an investment factor in e-resources for verifying the correlation between university libraries and academic research achievement.

Cottrell (2011) described a case at the University of St Francis (USF), where common fears and, in some cases, harsh realities of library budget reductions could be strategically allayed or altogether avoided through creativity, changes in motivation and implementation of redesigns in organizational work flows and tasks. This paper offered insight and direction to practitioners looking to investigate the feasibility of selectively increasing workload in order to increase overall value to their institutions, resulting in budget security during harsh economic times.

Cross (2011) argued that there was a causal relation between the rise of increasingly large for-profit publishing and the rise of the centralized big academic library run by library professionals. It proposed the decentralization of academic library budgets as a means to regain fiscal control.

Cuillier and Stoffle (2011) gave an overview of revenue-generation ideas and issues to be considered. At the UA Libraries, a student fee had been a significant source of funding and tips are offered here for getting a student fee approved. Finally, since funding shortages were likely to be an ongoing challenge, the importance of training and instruction in fundraising is emphasized.

Harsha et al (2011) analyzed about public research and development institutions, and project proposals were submitted by research groups to various government funded bodies for external financial support. The pattern of funding various research groups was analyzed using classification and regression tree (C&RT) technique. The study was aimed at exploring and forging an effective networking with funding agencies to supplement the ongoing research programmes of the Institute.

James-Gilboe (2010) summarized the results of that study, providing not only raw data on the state of marketing collections, but also best practice techniques for raising awareness and protecting budgets, emerging models of success, role models for effective marketing, effective vendor support, where to turn for products that conquer barriers between libraries and users, and effective marketing support, where to turn for expert advice.

Lorenzen (2010) conducted a survey of library development officers to assess fund raising methods and planning. The main finding was that the ability to identify likely donors was cited as the most important element of successful fund raising by academic libraries. Means of marketing the library to attract likely donors were discussed such as the holding of special events, tours of special collections, author's lectures and book signings and motion picture exhibitions.

Silverman (2010) provided suggestions for raising money for collections. The paper discussed and gave examples of strategies to raise an awareness of giving opportunities to support library collections. This paper suggested that traditional fundraising for collections had become more difficult, and innovative appeals were required to attract donors. The value of this paper was in its presentation of examples and strategies for raising funds to support collection building.

Culbertson and Wilde (2009) examined the use of the World Cat Collection Analysis tool and other measurements to analyze the strengths of collections supporting doctoral programs in a Carnegie Class 1 research university in order to enhance budgetary support for these collections. The authors looked at how this analysis was translated into requests for additional funding for access to materials that would support doctoral level research. This paper has shown how currently available tools for collection management can be used to educate a university community about the budgetary requirements of building graduate research level collections and to make a case for increased funding to support these collections.

Guarria (2009) evaluated the present budget allocation process and took corrective action regarding the distribution of the materials budget (books, CDs, DVDs, and VHS). This article provided useful information for acquisitions of librarians in analyzing a budget line - in this case, the materials budget that in many libraries is being restricted or reduced. The paper provided insight into an urban mid-sized library's acquisitions and the departments' efforts to manage more effectively the monies allocated to the department.

Price (2009) provided tips for collection development for libraries with a meager budget. This study found about any useful resources available for free because of the open access movement. Old ideas such as consortia and negotiating still help to keep costs at a manageable level for libraries. This paper combined new and old ideas and resources for electronic collection development into a short and easy-to-follow source.

Hwang and Chen (2008) proposed using Linear Goal Programming method to deal with the budget allocation of university libraries. It established an ideal, practical, flexible, and fair budget allocation model using goal programming of two dimensions. This model could be used to reduce the dispute about the budget among instructional units and implement the policy of collection development. Furthermore, the development of the interactive platform of collection budget allocation could be applied in the decision making of the budget allocation of university libraries.

Oyelude (2008) focused on how library technical services should budget in a society that heavily uses technology. The need for library budgets was very important. There was a need for research into budgeting for technical services. The author believed the most important item to budget in technical services was personnel, which should be grouped into professional staff, technical staff, and auxiliaries. The author explained why budgeting is important in an information and communications technology environment.

Walters (2008) presented a theoretically grounded method of developing a fund allocation formula that did not rely on the initial estimation of weights or allocations. Approximately 40 percent of academic libraries used formulas to allocate book funds

among departments or subject areas. This method was likely to be especially useful for libraries that had never used fund allocation formulas—those that have no prior basis for rating the importance of particular subject areas, departments, or variables.

Allen and Dickie (2007) tested the hypothesis that a positive relationship exists between academic library funding (dependent variable) and selected institutional variables taken as indicators of the demand for library services at the university .The research employed 11 years of longitudinal data from 113 members of the Association of Research Libraries to create a multiple regression model. Empirical results indicated that operational indicators of the demand for library services are positively associated with funding, and most of the associations are statistically significant at the five percent level or less in two tail tests. The study suggested that this formula might be useful as a tool for library funding and assessment of adequacy of library budgets.

Walters (2007) presented statistically informed about the method of weighting and combining the variables in a fund allocation formula. The regression-based method of fund allocation uses current, historical, or hypothetical allocations to generate a formula that excluded the influence of non-relevant variables as well as the influence of arbitrary or non-systematic variations in funding. The resulting fund allocations were based on the principle of equity the idea that departments with the same characteristics should receive the same allocations.

Donlan (2006) focused on the process of determining an equal and fair library budget allocations and expenditure for several information resources such as books and journals at the Florida Gulf Coast University (FGCU) in the U.S. The FGCU believed that an allocation formula should reflect its institutions values and support its existing

programs and clientele. The university determined that among the common variables of allocation formulas, the credit hours by discipline, resource costs and levels of library usage are the most important.

Moyer (2005) concentrated on the common theme of budget cuts, one library presented its award-winning story to provide information to a small no. of user community that extended from other common community and state resources. Several methods for living in a world of reduced funds include, thinking out of the proverbial box and doing things in different ways, partnerships with organizations and grant institutions; doing events and programs for specific groups and involving the entire user community in the process. This paper took those questions and gave the authors a clear picture of how to accomplish success.

Kalyan (2003) noted that libraries had been allocating their budget using a formula based on usage statistics and cost of the materials. He had tried to arrive at an allocation formula that took into account the constant and variable factors that would determine the strength of the library collections. This formula was flexible enough to be applicable to a budget of any amount in a small to medium size library. The formula was successfully applied by the Seton Hall University Library to distribute new grant money from the National Endowment for the Humanities (NEH), as well as to the whole Library materials budget, with some modifications.

2.5 LIBRARY SERVICE

Library services are designed to facilitate and invite use of resources and satisfy the reading goals of individuals of users. The services include organizing materials for

ease of access, convenient use and lending procedures that provide equal opportunity for all users to use the materials.

Green (2013) explored how library services were offered at the international branch campuses of U.S. institutions of higher education, including librarians' experiences, challenges faced, and collaborations with the home U.S. institutions. The sample survey data were analyzed qualitatively, suggesting insights on how librarians were embedded in student instruction and staff training and how libraries played an important role in the establishment of international branch campuses. The study was strongly suggested to gain more concrete inferences, and the article discussed the role of U.S. academic libraries in the globalization initiatives of their home institutions.

Matthews (2013) discussed the importance of value of information and the value of library in providing that information. It mentioned that the information in a library's collection, be it a journal, book, audio, or video file, had tremendous value for the undergraduate student, faculty member, or researcher. However, with budget cuts decision-makers often see libraries as dispensable, therefore, upon libraries to devote the resources needed to document the evidence of the value of the library.

Nzivo, and Chuanfu (2013) discovered the met and unmet needs as well as barriers encountered in library use by international students. The findings of this study revealed that Chinese academic libraries were considerably well perceived by international students. This paper acknowledged that the study was limited to Wuhan University and there was a need for further studies on non-Chinese speakers, particularly, international students to obtain important information on their perception of library services and information resources.

Rehman (2013) measured the service quality of university libraries of Pakistan from the user's perspective. The data were collected from undergraduate and graduate students and faculty members of 22 Pakistani universities through a locally modified survey in Urdu. Study findings indicated that libraries overall did not meet users' minimum acceptable and desired levels of service quality. The zone of tolerance identified eight problematic services, most of which were related to the information control dimension. This study also indicates a wide gap between users' perceptions and expectations of service quality.

Chen and Chou (2011) identified service improvement techniques for an academic library. First, reader needs and their importance, and satisfaction degrees were examined via questionnaires. Second, the service improvement techniques for satisfying the reader needs were developed by interviewing experts. Following, a relation matrix was constructed by GRA (Grey Relational Analysis). The empirical study specifies top five user needs and service improvement techniques respectively, and some practical suggestions were raised for academic libraries.

Tyckoson (2011) reviewed the history of reference service from a management perspective. Topics covered include definitions of reference service, staffing, service models, modes of communication including remote reference services, collections, education and training, and assessment. The author discussed changes over time and current challenges for reference managers.

Sutton, Bazirjian and Zerwas (2009) examined potential reasons for similarities and differences, including student body profile, institutional differences in library services and demographic factors. The findings indicated that local factors

dramatically affect the responses and should drive local service decisions rather than relying on global aggregate data.

Mahesh and Gupta (2008) studied about Current awareness services provided by libraries and information centres. With the advent of electronic journals and databases, the current awareness services provided by libraries and information centres were undergoing a shift from being a library centred service to a publisher centred service. The article explored this shift highlighting the different kinds of current awareness services and challenges ahead.

Bracke, et al (2007) surveyed to determine user satisfaction, logged questions actually asked to establish appropriate staffing needs, and calculated the cost of providing these services. As a result of the data gathered, new service and staffing models were implemented that reduced both the number of service points and reliance on professional staff without a reduction in perceived quality.

Cheney et al (2006) explored the role of the academic library's news collections in complementing the university's Newspaper Readership Program and supporting faculty efforts to develop their students' critical thinking and media literacy skills. The authors suggest that digital news forms, including television, should be considered and included as part of the library's collections. In this light, lessons can be learned from convergence taking place in the news industry.

De Groote et al (2005) found that the majority of questions were submitted by persons affiliated with the university, that ready reference and directional questions predominated, and that the librarians were able to successfully share the duty of answering the general reference questions while ensuring that the questions requiring

subject expertise were answered by the appropriate subject specialists. Analysis of the types of questions will inform future decisions regarding webpage redesign, online instruction needs, and more appropriate FAQs (Frequently Asked Questions.)

Harer and Cole (2005) identified the critical processes and performance measures of quality that could serve as a framework for new measures for assessing quality in academic library services and programs. These critical processes and performance measures were developed utilizing the structure and criteria of the Malcolm Baldrige National Quality Award's 1999 Education Criteria for Performance Excellence. The results of the study showed that a student, faculty, and management focus were the most important aspects of academic library programs and services for ensuring quality.

Shi and Levy (2005) examined the theoretical models applied in library assessment activities. A brief review of the history of library assessment practices and the evolution of their respective approaches was presented. A discussion of the theoretical concepts applied to these assessment activities in library and information science (LIS) as introduced from other fields, such as marketing and management information systems (MIS), follows. The conceptual issues and practical concerns in library assessment were discussed. Focus was placed on the review of research concepts of service quality, user satisfaction, and their applications in library assessment activities.

Tag (2004) surveyed information needs and skills of incoming transfer students at Western Washington University (WWU) showed that while many reported some familiarity with standard library resources, over half requested some form

of library instruction. To date, only limited information on the research abilities and library needs of this group has been reported.

Han and Goulding (2003) attempted to describe the paradigm of information and reference services in the digital library. Based on the fact that automatic digital library technologies were solving more and more information needs and changing the mode of user service, the authors suggested a three levelled system that supports users' information needs. The role of reference librarians at each level was discussed. Finally, digital reference service, a new means of delivering services, was briefly reviewed. The authors emphasized that a systematic process to support users' information needs in the digital library was required.

Cook, Heath and Thompson (2001) confirmed that a single second-order factor was associated with the delivery of high-quality library services in a research university environment. However, a hierarchical factor analysis also demonstrated that research library users simultaneously think about library quality at multiple levels. Nevertheless, several first-order factors contribute important unique information to the notion of service quality. As different types of users place varying degrees of importance on the first-order factors, the utility of the hierarchical model was demonstrated.

Ferguson (2000) approached to reference service had not altered in recent decades despite dramatic changes in user needs, customer service technologies, and transformations in other areas of the library. Rather than add more layers of experimental services that deplete resources and increase complexity, information service should be reconceived to include new partners in support of the use

of technology while undertaking substantially new approaches to on-site and network-based information service. By reengineering organizations in ways that bring librarians and technologists together within a common service environment, information service agencies can more effectively meet our users' needs by moving more fully and flexibly into the network as changing circumstances warrant.

2.6 LIBRARIANS' SKILLS

Richard Nelson and **Sidney Winter** defined skill as "a capability for a smooth sequence of coordinated behaviour that is ordinarily effective relative to its objects, given the context in which it normally occurs."

Ibraheem and Devine (2013) undertook a study to identify and clarify issues related to the employment in academic settings of African librarians who had relocated to the United States. It examined, by means of a survey, employment issues concerned with education, credentialing, language skills and cultural bias from the perspective of those librarians and concluded with a recommendation regarding the manner in which their skills might be utilized for the benefit of their libraries.

Cassella and Morando (2012) studied about professional roles and skills to be developed to secure effective IR management. The survey findings show that the professional profile of the repository manager was a multiform and complex one. Italian librarians were of the opinion that the skills required to promote the repository within the institution and those required to deal with copyright issues as the most essential skills repository managers should acquire and be trained for. Technical skills were needed to deal with interoperability standards and protocols. Academic

programmes should be developed to include communication, project management and team work skills and pay more attention to copyright issues.

Kennedy and Brancolini (2012) reported on the development and results of a recent survey of academic librarians about their attitudes, involvement and perceived capabilities using and engaging in primary research. It updated earlier studies of academic librarian research, with the introduction of a confidence scale, it also contributed new insights regarding how prepared librarians believe themselves to be with regard to conducting research. The analysis of the responses to the confidence scale and other survey questions suggested several paths for future research about academic librarians and their research agendas.

Shank and Dewald (2012) seek to fill a gap in the literature by examining the perceptions of current administrators toward four domains and their associated skill sets needed to fulfil the library's instructional role. The findings of this research indicated that library administrators' value the traditional skill sets more than the newer non-traditional skills. The results and possible implications, as well as directions future studies could take, were discussed.

Pegrum and Kiel (2011) reported on the implementation of a professional development program in emerging technologies for librarians at the University of Western Australia. A qualitative analysis of participants' online contributions and course projects, complemented by quantitative survey data, reveals that most librarians acquired new understandings of both pedagogy and technology, many were able to apply newly gained skills in the workplace; and some went on to create pedagogically grounded, technologically enabled resources of ongoing value to the library.

Mathews and Pardue (2009) examined the IT skills employers deem essential by conducting a content analysis of randomly selected job ads from ALA's online JobList over a five-month period. They found a substantial need for Web development, project management, systems development, and systems applications. This suggests that librarians were incorporating a significant subset of IT professionals' skill sets. This trend possessed challenging questions for their identity and profession.

Mei-Ling and Chi-Tzu (2009) explored the core values, purposes, functions, and objectives of libraries and proposed a set of core competencies for librarians in Taiwan. First, focus group method was used to understand librarians' opinions on the subject matter. Two documents released by the American Library Association informed the discussion protocols – the 2004 Core Values of Librarianship as well as the 2008 Core Competencies of Librarianship. Based on the survey result, this study identified 12 library values, 11 librarian roles, and a set of core competencies comprising of 55 items in eight categories. It also identified 14 new library functions in the digital age. The findings could be used in the planning of library education and the hiring and evaluation of library employees.

Palmer, Dill and Christie (2009) reported on the results of a national survey conducted in the summer of 2006 of academic librarians' attitudes toward open access principles and related behaviours. While attitude responses were largely positive, there were differences in the levels of support related to respondents' job descriptions and funding of open access activities. Most significant was the discrepancy between stated support of library involvement in open access initiatives and significantly lacking action toward this end. The results offered insight into how open access proponents may better focus their advocacy efforts.

Kinkus (2007) presented an overview of professional project management and a literature review from the library science and management literatures. A content analysis of librarian position announcements was conducted and indicates that project management skills were in demand for librarians. However, it was unclear whether current library science literature and education adequately address project management skills or other traditionally "extra-librarian" leadership qualities now needed to manage project based initiatives in libraries effectively.

Mayer and Terrill (2005) conducted an online survey to collect opinions from academic librarians. Arguments in favour of having advanced-subject degrees include development of research skills, credibility, and overall improved job performance. Arguments against it included the fact that inadequate salaries, and the validity of developing subject expertise via other means. The need for advanced-subject degrees may vary by many factors, including individual career goals and local institutional culture.

Winston and Dunkley (2002) presented a rationale for the identification of an important component of such a statement of leadership competencies in the context of the knowledge and skills associated with development and fund-raising. This research described the areas of expertise, experience, and skills associated with academic development positions in colleges and universities as a basis for identifying leadership competencies that were relevant to academic librarians and administrators.

2.7 PRESERVATION

Preservation is a branch of library and information science concerned with maintaining or restoring access to artefacts, documents and records through the study, diagnosis, treatment and preservation of decay and damage (**Nagar,** 2008).

Krtalic and Hasenay (2012) aimed to explore a theoretical and methodological approach to preservation management in libraries relying on the basic presumption that preservation was a complex and comprehensive process that involves many different and seemingly diverse aspects whose efficiency lies in preservation management. The paper described a model of organising preservation activities into an efficient and successful preservation system, and establishes a methodology for exploring diverse preservation issues on national and institutional levels.

Ovowoh and Iwhiwhu (2010) investigated the preservation and conservation of library materials in higher institution libraries in Nigeria and Fifty questionnaires were administered to the staff of the two libraries. The study revealed that there is no written policy on preservation and conservation in the libraries studied. The main constraints to proper preservation and conservation in academic libraries were lack of funds, lack of qualified conservation librarians, non-committal attitude of staff, and lack of adequate and dependable storage facilities. Very few librarians were conversant with preservation management, thus militating against any comprehensive preservation programme. There was need to improve library materials in libraries, orientation for staff, everyday care, and staff trained in preservation and conservation.

Sahu, (2006) explored the perception of the users of the Jawaharlal Nehru University (JNU) Library, New Delhi, India, with regard to the quality service provided by it. SERVQUAL as a diagnostic tool was used to measure service quality. It was defined as the difference between customer perceptions and expectations of service. Service quality was essential to change the work culture among the employees and generate their involvement in the services of the library. It should be

focused on continuous improvement in products and services, with greater employee involvement and an increased emphasis on customer needs.

Alhassan (2004) gave reasons why materials should be preserved and conserved in the academic libraries. There had been a drastic reduction in the allocation of funds for books, limiting the library's ability to acquire new material. Journals, which carry the latest findings by researchers, were the worst hit. The high foreign exchange rate was a problem, and therefore librarians must preserve material they have already acquired. Library materials must last as long as possible, and be preserved for active use for the next generation. An old book, whatever its subject or quality, was truly a portion of history. We might imitate it or print it in facsimile, but we could never exactly reproduce it.

Rawat (2003) studied the need to retain collection of age old books, journals, etc., for a longer period. Preservation of select highly useful and valuable materials on optical discs had higher benefits than merely reducing space problem. The chaff could either be consigned to remote warehouses or weeded out with other unwanted editions.

Bhargava and Vijayavergiya (2000) discussed the need for preservation of various kinds of old documents. They highlighted various factors of preservation and objectives of preservation and suggested preservation approaches in the present day context which include IT options, microfilming and other methods.

Liu (1999) looked briefly at changes in preservation practice for library materials in China, as well as constraints and, in more detail, current needs in this area. China had a long history of library preservation. For 3,000 years the Chinese had used various techniques to restore ancient books. There are 4 main examples of this: 1. the

expansion of the range of protected documents, 2. the renovation of conservation treatment, 3. paying more attention to standardization and specifications, and 4. improving the study of conservation technology. With the development of technology, the number of audio-visual materials and electronic publications collected in libraries increases every year. Information preservation measures should be taken to transfer the large quantity of paper documents into microforms.

Madubuike (1998) emphasizes the significant role that libraries played in the social, economic, and political development of a nation. They were the “intellectual brickyards” of our civilizations, fundamental to survival and growth. It was important to take adequate care of library resources. Limited funds, low-quality book production, and a high exchange rate were some reasons why preservation of library collections was essential.

Kroon (1997) was of the view that all libraries need to preserve and conserve their collections against deterioration from a variety of sources including chemical and biological threat, as well as physical damage through handling. And libraries should prepare a disaster plan for dealing with emergencies and ensure that all materials treated are fully documented.

Osifoh (1997) identified dampness, poor ventilation, which could cause mould and fungi attacks on documents, high temperature and humidity, aerosols and noxious gases from polluted air, insect and rodent infestations, as enemies of non-print materials. Electronic or electric machinery could be an enemy to magnetic tape, because they may generate magnetic currents. He recommended that magnetic tapes be stored in cardboard or inert plastic and be rewound at least once a year.

Senapti and Nagta (1996) identified the need for preventive measures in conservation and preservation of library materials and records. These included proper housing of documents, protection against heat, humidity, light, air pollution, dust, insects, fungi, fire, water, and mishandling. They suggested inclusion of conservation and preservation in library education and training.

Alegbeleye (1996) advocated a preventive conservation and preservation approach in African countries, which should focus on improving the environment, controlling light, temperature, humidity, and pollution.

Matwale (1993) described the situation of libraries and archival institutions in Kenya, describing inadequate funds and lack of qualified personnel as major causes of archival underdevelopment, including the absence of proper conservation work in the national archival and library institutions.

Mazikana (1993) stated unequivocally that the preservation and conservation scene in Africa [was] in a dismal state for the following reasons: Many buildings housing library and archival materials were grossly inappropriate, as they were built at a time when preservation and conservation was not an important issue. Most libraries and archival buildings were not equipped with air conditioners to stabilize the temperature and humidity of the storage areas. The few libraries and archives with bindery and repair facilities lacked qualified staff and working equipment. Mazikana stressed the need for a combination of facilities and maintenance procedures that were conducive to longevity of information resources. The quality of paper, film base for microforms, and the disks for computers must be made with substances that assure a long life. Sound preservation and conservation programmes were multifaceted.

Elaturoti (1990) identified dust, water, and insects as the factors that affect nonbook materials. He recommended that they be cleaned regularly to remove dust, kept away from water, which can cause the materials to corrode, and kept away from insects.

Chapman (1990) had outlined, the starting point of conservation programmes is the creation of a policy document specifying, among other things: Preventive measure to minimize deterioration in storage and handling Staff and user training programmes, Housekeeping routines to clean, protect, and extend the life of materials, Security measure and contingency plan for disaster control and recovery and Conservation treatment for repair of damaged originals. It was doubtful that many Nigerian libraries and archives had such policy documents.

2.8 SECURITY

According to Encyclopaedia (1981), quoted by Adamu (2006), "security refers to device designed to guard library materials against crime, accident, disasters, fire and attacks".

Akor (2013) examined the security management for prevention of book thefts in University libraries with Benue State University Library, Makurdi. Benue State. Nigeria. The aim of the study was to identify the causes of book thefts and mutilation in University libraries and how to curb and preserve the continuous use of this information resource in the library. The survey research method was employed. Results of the analysis showed that the university library books are stolen and mutilated due to inadequate library materials, financial constraint and selfishness on the part of library users. It was also discovered that various methods were adopted for stealing and

mutilating of the library books which include tearing of book page(s) off, removing of the book jacket cover, hiding of books under their clothes and their pockets.

Maidabino (2012) recommended the implementation of collection security management plan as a viable way of protection against theft and mutilation of materials in university libraries. The paper concluded by proposing a framework for action which could serve as a guide for university librarians and stakeholders to ensure the protection of their library collection.

Sumner framed objectives related to security and they were (1) to determine the risk assessment of information security threats, based upon the perceived impact and the perceived probability of occurrence of these threats; (2) to determine the extent of risk mitigation, based upon the perceived level of preparedness for each of these information security threats; and (3) to determine the extent to which the occurrence and the impact of information security threats relate to the level of preparedness.

Anunobi and Okoye (2008) found out that, "academic libraries are faced with crossbreed challenges in order to acquire the necessary skills". One challenge is the issue of security management for prevention of theft of print and non-print resources in the academic libraries. There is a need for academic libraries to ensure accessibility and effective use to make an effective program of collection security necessary. This programme must include assessment of collection security management for prevention of incessant book thefts and the measures' used in curbing security infringement.

Muir (2007) explored the validity of some of these concerns and outline recommendations and best practices to minimize the risks to libraries and their patrons. The potential risks associated with RFID security violations were a potential threat and

any library implementing an RFID system should be aware of all the facts before proceeding. RFID literature should be reviewed by any library considering implementing RFID .

Veiga and Eloff (2007) evaluated four approaches towards information security governance frameworks in order to arrive at a complete list of information security components. The information security components are used to compile a new comprehensive Information Security Governance framework. The proposed governance framework could be used by organizations to ensure they were governing information security from a holistic perspective, thereby minimising risk and cultivating an acceptable level of information security culture.

Ajegbomogun (2004) examined the incidence of theft and mutilation of library materials, and gives users' assessment of library security and factors that influence theft and mutilation among library users in Nigerian university libraries. Of the users surveyed, 62.63 percent admitted that stealing and mutilation were common phenomena among library users. Some reasons given for this were limited copies of library books, fear that one may not find the materials on the shelf and negligence of library security men.

Sturges, Teng and Iliffe (2001) concentrated on user privacy and had taken on a fresh importance as digital resources and systems become increasingly important in libraries. Public and professional concern has been aroused by numerous instances of the privacy-threatening effects of current technical and legal developments. Not only do loan and other transactions leave traces in library management systems, but internet use at public terminals in libraries was also vulnerable to intrusion. Guidelines on

privacy matters for information professionals were being developed on the basis of the investigation.

King, Larsen-Ruffin and Stewart (2000) reviewed several software programs that combine security and statistical features, two security products, and two Website statistics programs. This article helped librarians to make informed decisions regarding software programs that track electronic resource use and provide appropriate security to access those resources.

2.9 INFERENCES

The above literature focused on various areas related to Information Resource Management and its impacts. They showed the results which are obtained at the international and national level. They gave a detailed picture of its application in Libraries and models, finance, skills, etc.. Journals, online resources (like Science Direct, Emerald online databases, LISTA, SCOPUS, Pro quest) and books were referred and the researcher found 157 articles relevant to this study.

1. The reviews have given the detailed information related to basic concepts of Information Resource Management and its general application.

2. The reviews stated that quality based services are most needed among the users and libraries should concentrate on collection development.

3. The reviews have studied the various models of Information Resource Management and its usage in libraries.

4. The reviews concentrated on various issues related to preservation and examination of the general trend in problems concerning library security.

So far no study has been conducted in this area at state level with special reference to Tamil Nadu. Based on the reviews and results the researcher framed his topic on Information Resource Management.

CHAPTER III

METHODOLOGY

The present chapter deals with the methodology adopted by the researcher for the study. Scope of the study, hypotheses, research design, universe and sampling, pilot study, tools for data collection, statistical application of data, problems encountered by the researcher and the limitations of the study have been explained.

3.1 RESEARCH DESIGN

Research design is a mapping strategy. It is essentially a statement of the object of the inquiry and the strategies for collecting the evidences, analysing the evidences and reporting the findings. (**Singh and Bajpai**). Research design provides a plan to undertake systematic study and helps to provide procedures to undertake the research work and ensure objective, valid, and economic undertaking of the study. Research design enables the researcher to put his study on a sound scientific footing and decide in advance the what, why, and how of his study. It acts as a guide to conduct the various steps in the researcher's study in an objective, valid, and economic way.

In this study the researcher has attempted to describe the management of information resources among the librarians in their libraries and the use of information resources by the users. Management of information resources and the association between socio-demographic variables of librarians and users have also been studied. Hence for this study, a descriptive research design is used.

3.2 SOURCE OF DATA AND UNIT OF ANALYSIS

For the present study, the researcher has acquired the primary sources of information through questionnaire method from librarians and users of Arts and Science Colleges affiliated to Bharathidasan University. Besides, the secondary sources of information have been collected from Books, Journals, Theses and Websites.

3.3 FIELD OF STUDY

This research study was undertaken among librarians and users of Arts and Science Colleges affiliated to Bharathidasan University, Tamil Nadu, India.

3.4 UNIVERSE

The universe of the study covers the librarians as well as the users of Arts and Science Colleges affiliated to Bharathidasan University.

3.5 SAMPLING DESIGN

A sample is a set of individuals selected from a population and usually is intended to represent the population in a research study. (**Gravetter and Forzano, 2009**).

a) Librarians

The researcher used census method to collect data from Librarians.106 Librarians working in 106 Arts and Science Colleges affiliated to Bharathidasan University were taken up for the study. Though 106 questionnaires were distributed but only 77 librarians responded and the response rate is 72.64%.

b) Users

The researcher used stratified sampling method to collect data from users. 16 colleges were selected among 77 colleges. 25 respondents were selected for each college from sixteen colleges. Based on the geographical division, one Government, one Government Aided and two Self financing colleges are selected for studying the users' opinion about Information Resource Management.

Four zones of user respondents

Zone 1	Tiruchirappalli Zone
Zone 2	Thanjavur zone (including Thanjavur, Kumpakonam, Nagappattinam, Tiruvarur)
Zone 3	Pudukkottai zone
Zone 4	Ariyalur zone (including Ariyalur, Perambalur, Karur). (Appendix - E)

An essential supporting structure of a sampling in this research is shown in figure 3.1

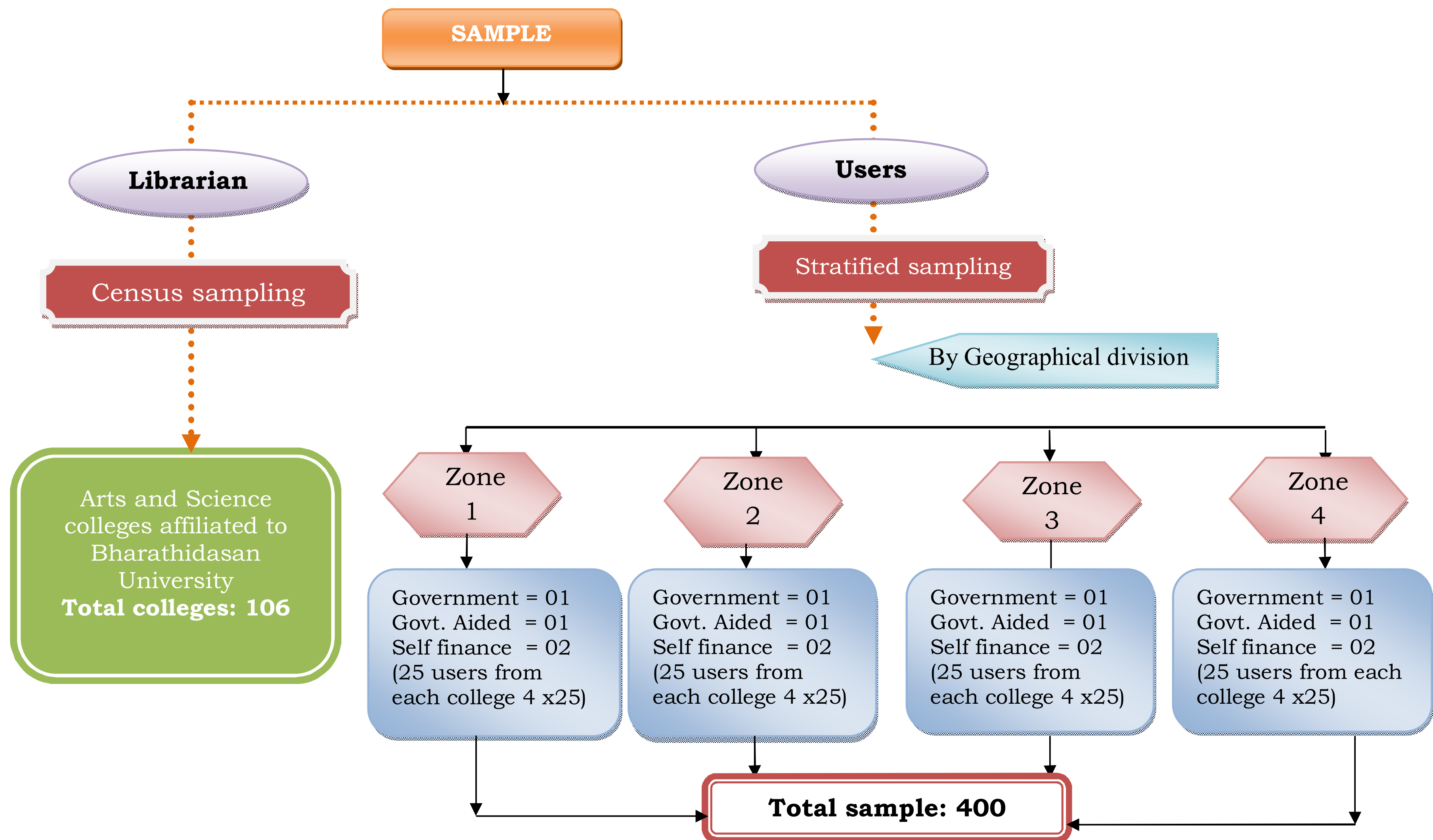


Figure 3.1 : Sampling Framework

3.6 METHODOLOGY

A methodology shows how research questions are articulated with questions asked in the field. Its effect is a claim about significance (**Clough, 2007**).

3.6.1 Data Collection instrument (Tool)

The choice of a data collection method is one of the most important steps in the research process. Literature survey and reference of journals gave more clarity for the researcher in determining the relevant tools for data collection. The questionnaire was selected since it is the most appropriate data collection instrument for this study. Data collection for the study was carried out from August 2011 to January 2012 by visiting the respondents in Arts and Science Colleges affiliated to Bharathidasan University. The questionnaire for librarians consists of ten segments namely, Part I: Personal information about the librarians, Part II: Book selection tools and methods, Part III: Method of acquiring information sources, Part IV: Communication methods to acquire information sources, Part V: Barriers in acquiring information sources, Part VI: Management of information source collection, Part VII: Library services, Part VIII: Security measures in the library, Part IX: Self - appraisal of Information Resource Management (IRM) skills among librarians, Part X: Evaluation methods adopted to evaluate the collection. The questionnaire for Users consists of five segments namely Part I: Personal information about the Users, Part II: Purpose of library visit, Part III: Usage of Information sources, Part IV: Order of preferences in various resources and supporting services and Part V: The difficulties faced by the users in using the library services.

3.6.1.1 Distribution of questionnaires

The data collected from the librarians are shown in the table 3.1 and it also shows the number of questionnaires distributed, received and percentage of responses.

Table 3.1

Distribution of Questionnaires

S. No.	Type of Institution	No. of Questionnaires Distributed	No. of Questionnaires Received	Percentage	
				Within category	Overall
1	Government	15	11	73.33	14.3
2	Government Aided	19	19	100	24.7
3	Self financing	72	47	65.27	61
Total		**106**	**77**	**72.64**	**100**

3.6.1.2 Conceptual Framework

A basic structure underlying a concept of this research is presented in figure 3.2.

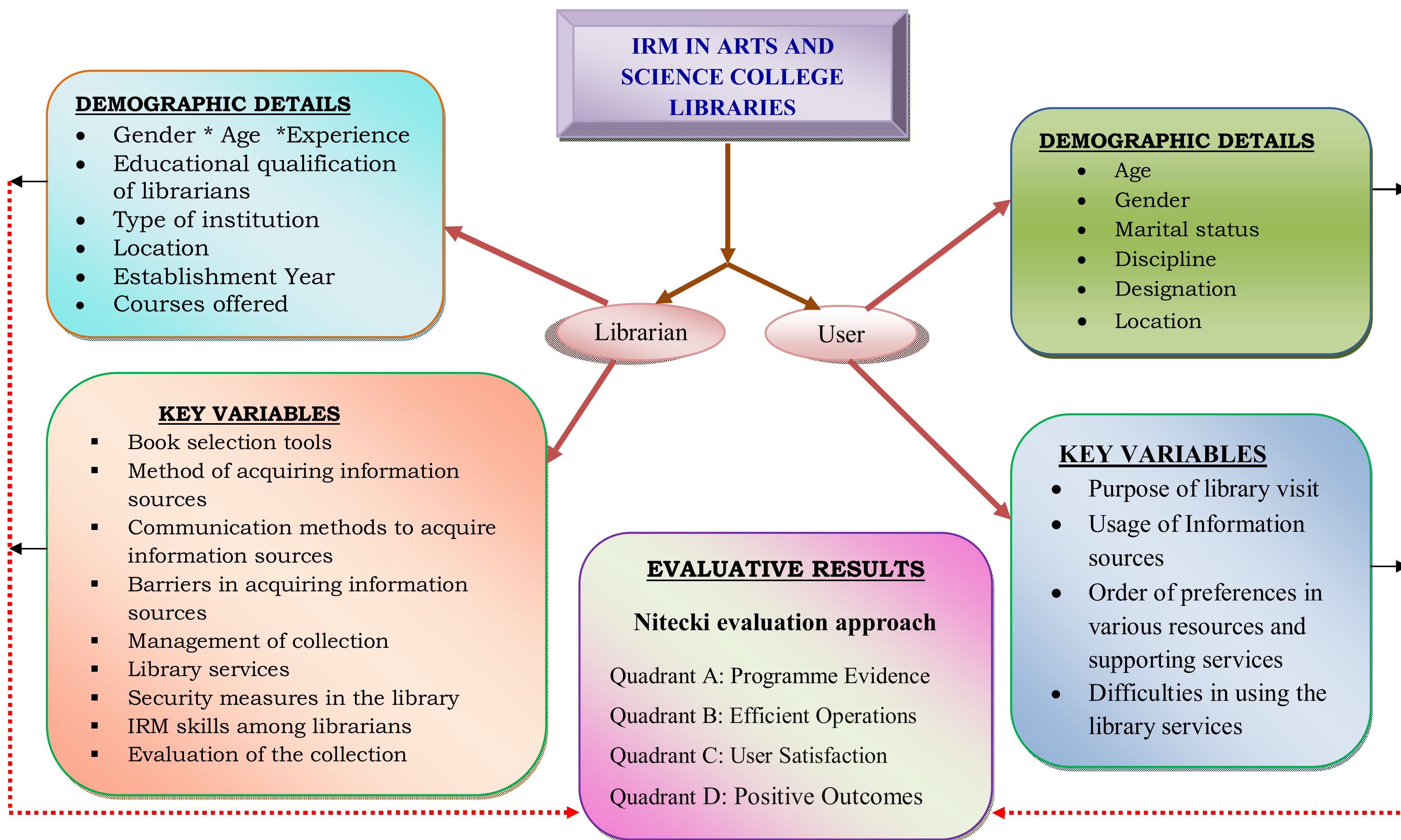


Figure 3.2 Conceptual Framework

3.6.2 Pilot study

A pilot study was undertaken to get firsthand information after the identification of the problems. The pilot study was done to ascertain the relevance and suitability of the research process such as adequacy of the universe. The pilot study was carried out among 25 librarians and 50 users of the Arts and Science Colleges. Their suggestions and opinions were also incorporated regarding the usefulness of the study to select respondents, sample size and mode of data collection using questionnaire method was ascertained and finally the sample frame was finalized.

3.6.3 Validity of the tool

Validity refers to a measure of the truthfulness of a measuring instrument. It indicates whether the instrument measures what it claims to measure **(Jackson, 2009)**. The content validity refers the extent to which a measuring instrument covers a representative sample of the domain of behaviours to the measured **(Jackson, 2009)**. The content validity of the questionnaire was tested by a panel of experts comprising library professionals and faculty of library and information science. The validity of the questionnaire was tested using Statistical Package for the Social Sciences (SPSS) version 17.0.

3.6.4 Reliability analysis for variables

Reliability refers to an indication of the consistency or stability of a measuring instrument **(Jackson, 2009)**. To analyze the reliability of the questionnaire, Cronbach's Coefficient Alpha test was applied and the value was found to be

satisfactory. A set of variables have been identified based on the literature review. The variables were categorized into 17 major groups and their respective alpha values are shown in Table 3.2

Table 3.2

Reliability Analysis for Group of Variables

S. No.	Description	Number of Items	Cronbach's Alpha value
1	Book selection tools	5	.690
2	Book selection methods	5	.709
3	Method of acquiring information sources	7	.790
4	Communication methods to acquire information source	5	.605
5	Barriers in acquiring information sources	6	.592
6	Management information source collection	6	.680
7	Library services	8	.683
8	Problems in information source collection	10	.710
9	Security measures in the library	10	.769
10	Preservation of information resources	7	.616
11	IRM skills among librarians	10	.845
12	Evaluation of the collection	5	.702
13	Purpose of library visit	6	.630
14	Usefulness of information sources	7	.734
15	Satisfaction of information resources	10	.777
16	Order of preferences in various resources and supporting services	12	.744
17	Difficulties in using the library services	9	.749

Cronbach's alpha values for all 17 groups were above 0.5, which shows that the variables taken up for the study and the grouping of variables are reliable in nature.

3.7 DATA ANALYSIS AND INTERPRETATION

Analysis of the data is the most skilled task of all the stages of the research and it provides the crucial link between research data and information that is needed to address research questions. This was due to the nature of the data involving both qualitative and quantitative variables. The collected data was analyzed using SPSS (Statistical Package for Social Sciences) 17.0 version. Simple tables were prepared for the demographic data. Statistical techniques such as Chi square test, Proximity matrix have been used to analyze the hypotheses and the objectives of the study. Graphs and diagrams have been included wherever necessary to make the dada analysis more functional.

3.8 OPERATIONAL DEFINITIONS

The key concepts used in this study are defined in the following manner**.**

3.8.1 Information

Information is made up of symbolic as well as descriptive elements, communicating knowledge. It refers both to the substance or contents of documents and to the physical existence; the term is also used to designate both the message (substance and form) and its communication.

3.8.2 Information Source

The sources wherefrom one gets information are information sources. These sources comprise documents, institutions, organisations and human beings.

3.8.3 Information resource

A collection of valuable information generated by human activities is called information resource. In a broader sense, it also includes related equipment, personnel and capital.

3.8.4 Information Resource Management (IRM)

IRM is defined as the planning, organisation, allocation and utilization of information and related resources through legal, technological and other methods to support institutional goals and missions (Lai et al, 2005)

3.8. 5 Bharathidasan university

Bharathidasan University established in February 1982, and was named after the great revolutionary Tamil Poet, Bharathidasan (1891-1968). It offers arts and science programmes.

3.8.6 College

It is an institution of higher education, essentially composed of a faculty and students and it can be a part of a University or affiliated with a University.

3.8.7 Arts and Science College

Colleges which mostly provide education in the field of Arts (Languages and Literatures, Law, History, Philosophy, Religion, Social Science etc...) and in the field of Science (Mathematics, Physics, Chemistry, Biological science etc..). It provides Undergraduate, Postgraduate and research programmes.

3.8.7.1 Government College

College maintained by a unit of government at the local, state or federal level.

3.8.7.2 Government Aided College

It is run by private management but which received financial assistance from the government or unit of the government.

3.8.7.3 Self Finance College

Self Finance Colleges is that college which are maintained for the public by the private organization.

3.9 PROBLEMS ENCOUNTERED BY THE RESEARCHER

1. The key difficulties found at the time of data collection were (i) Protocols (ii) Lack of Librarians in colleges and (iii) Time constraints.
2. Data collection took several months because colleges are located in different places.

3.10 LIMITATIONS

1. Librarians working in Arts and Science Colleges affiliated to Bharathidasan University have been included.
2. For the present study the researcher has not included Fine Arts and Crafts colleges, Uni-faculty Institutions, Approved Institutions and University Constituent Colleges affiliated to Bharathidasan University.
3. In the Users category, the students of Undergraduate, Postgraduate and Teaching Faculties of the colleges where the respondents have been included.

The present chapter concentrated on methodology adopted by the researcher of this study.

CHAPTER IV

STATE - OF - THE - ART OF THE STUDY UNIT

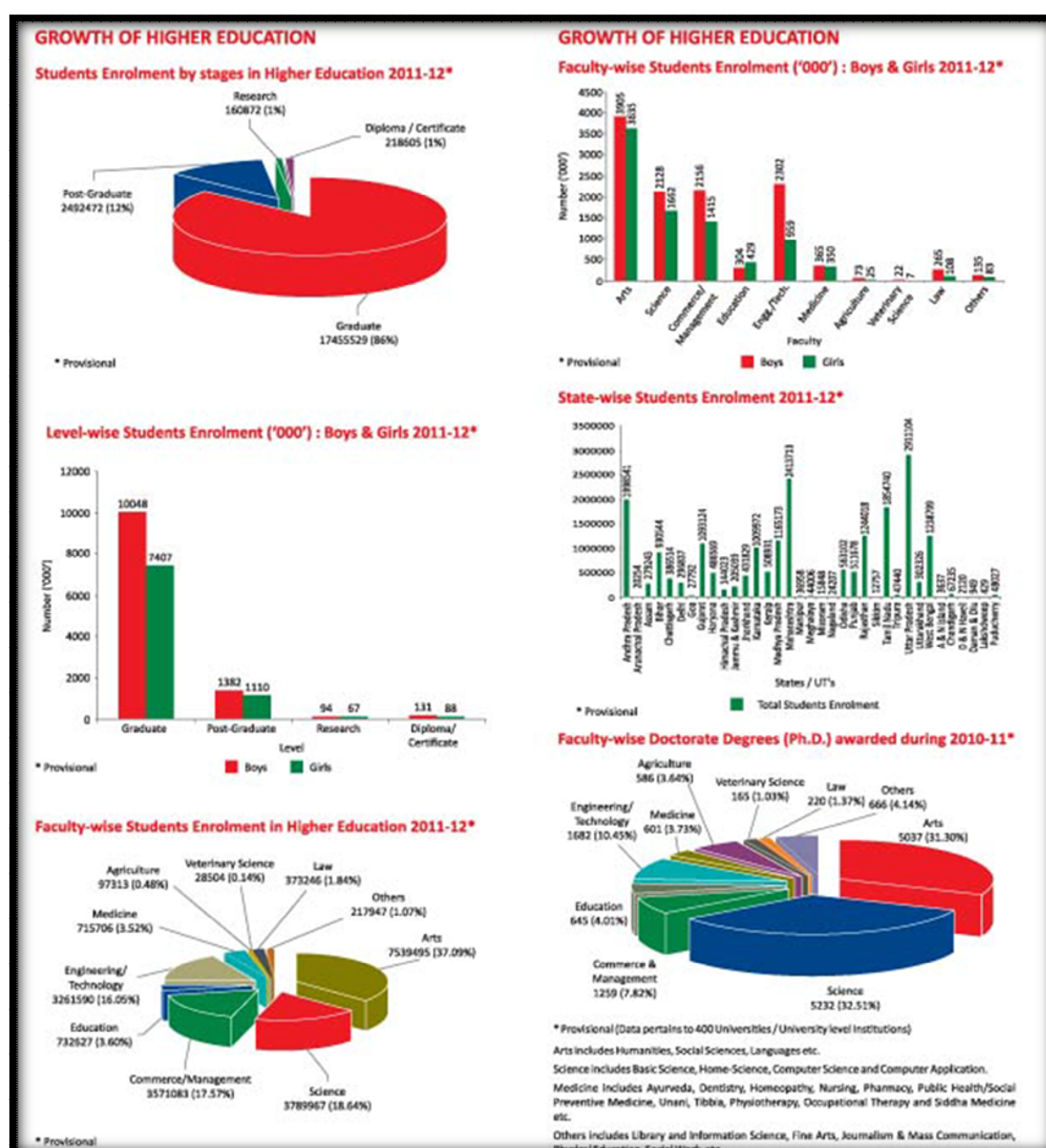
Higher education helps to get benefits in terms of monetary, non-monetary and social benefits. Indian higher education based on three aspects and categories i.e. quality relevance, efficiency of the system and equity. The higher education system in india has successfully resisted all attempts to bring changes. Some of the practices which persist, in spite of uniform condemnation by committees, commissions and individual educationists, have grievously developed the system. They are the affiliating external examination and compulsory subject group. Higher Education is defined as the education obtained after completing 12 years of schooling or equivalent and is of the duration of at least nine months (full time) or after completing 10 years of schooling and is of the duration of at least 3 years. The education may be of the nature of General, Vocational, Professional or Technical education.

4.1 GROWTH OF HIGHER EDUCATION SYSTEM IN INDIA

By 1923, there were 23 universities established across India. After independence, the Government of India realized that the economic and social progress would be contingent upon the spread of education across the country. Several initiatives were taken including the setting up of the University Grants Commission (1953) an autonomous body for the development and maintenance of standards in higher education and establishment of several other institutions of technical and scientific excellence. Nowadays 656 Universities are functioning in India (including State Universities 311, Deemed to be Universities 129, Central Universities 45, Private Universities 171). (Source : **U.G.C , 2013**)

4.1.1 Growth in Enrolment

The total enrolment in the higher education system has increased from 0.40 million in 1950-51 to 4.92 million in 1990-91. it increased in 2011-12 i.e. 203,17000. Both Central and State governments share the responsibility of funding higher education. There are several privately managed institutions which raise funding from Self- financing programmes and do not depend upon government.



(Source: University Grants Commission, 2013)

Figure 4.1 Status of Higher education in India

4.1.2 Higher education in Tamilnadu

The Directorate of Collegiate Education was functioning from 1965 under Directorate of Public Instruction with a view to administer exclusively the collegiate education. 27 universities are functioning in Tamilnadu and of these 12 Universities are getting their block grants from the Government of Tamilnadu and 503 colleges are functioning under the administrative control of the Directorate of Collegiate Education (source : Directorate of Collegiate education report, 2011)

4.2 BHARATHIDASAN UNIVERSITY

Bharathidasan University was established in February 1982, and was named after the great revolutionary Tamil Poet, Bharathidasan (1891-1968). Bharathidasan University's study unit is one among the UGC funded and State government affiliating university which is situated in Tiruchirappalli of the state of Tamil Nadu. To that is affiliated a range of colleges situated in urban, semi-urban and rural areas in the central and eastern districts of Tamilnadu with 106 Arts & Science Colleges (As per 2009). The University is an affiliating one with the jurisdiction over the eight districts of Tiruchirappalli, Pudukkottai, Karur, Perambalur, Ariyalur, Thanjavur, Tiruvarur and Nagapattinam. There are a number of colleges affiliated to the University including Arts and Science Colleges, Colleges of Fine Arts and constituent colleges.. Among them 8 government and 11 government aided colleges have autonomous status. There are totally 55 UG programmes and 62 PG programmes conducted in the affiliated colleges and the total strength of the students studying in the affiliated colleges is 1,14,276. (List of colleges is shown in Appendix D)

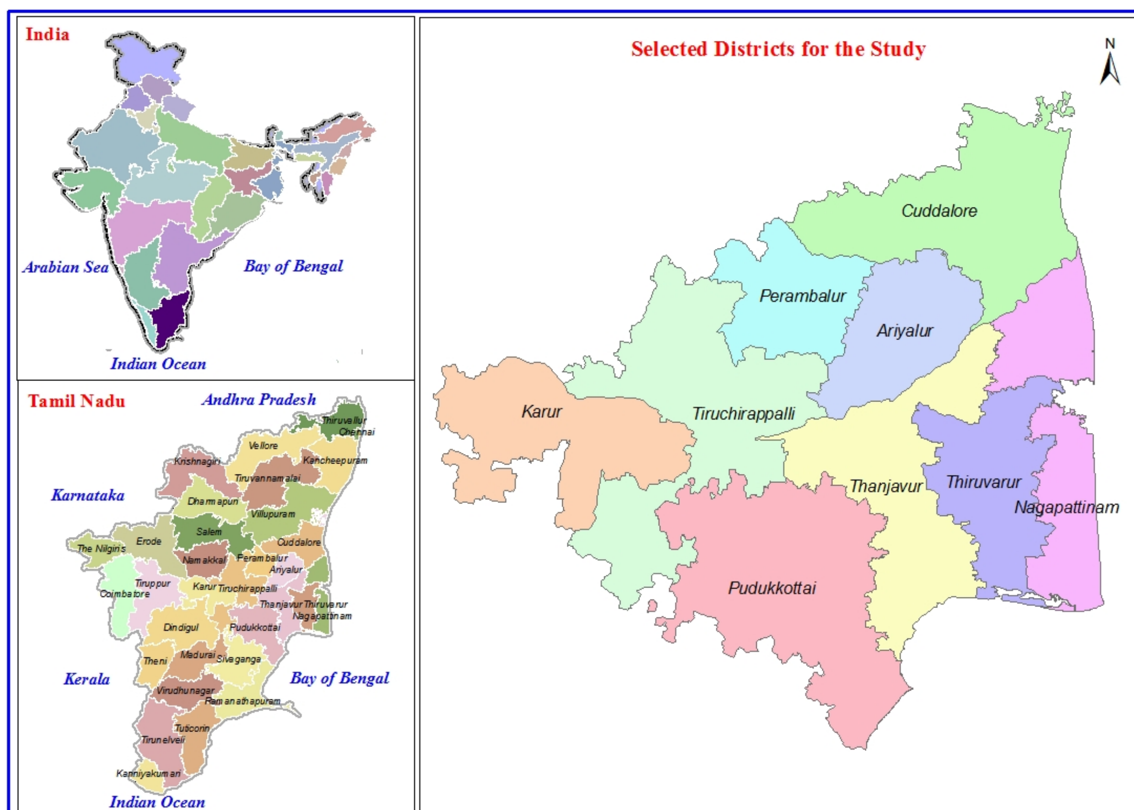


Figure 4.2 Study Unit

4.3 STATUS OF ARTS AND SCIENCE COLLEGE LIBRARIES AFFILIATED TO BHARATHIDASAN UNIVERSITY

The surveyed colleges are grouped into three categories “Government”, “Government aided” and “Self financing”. In this chapter, researcher has furnished the following details in the state of the study units such as the Year of establishment, Programmes offered, library collections, technical processing methods, library automation details, stock verification, sources of finance and details of library professionals. The same is shown in Tables 4.1 to 4.3.

4.3.1 Status of Government Arts and Science College libraries affiliated to Bharathidasan University

Table 4.1 shows a bird's eye view of Government Arts and Science College libraries affiliated to Bharathidasan University.

Table 4.1

Status of Government Arts and Science College Libraries affiliated to Bharathidasan University

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
1	Government Arts College , Karur	1966	UG, PG, M.PHIL & P.HD.	B = 51923 N = 6 M = 10 J = 62	CF = Adequate CP = No CG = Improved	C = Local CA = OPAC	AU = Commercial AC = Open SV = REQ	SG UGC User Fee	AP = 1 SP = 1
2	Government Arts College, Kumbakonam	1854	UG, PG, M.PHIL & P.HD.	B = 109500 N = 7 J = 23	CF = Adequate CP = No CG = Highly improved	C = Local CC = AACR	AU = Commercial AC = Closed SV = REQ	SG UGC User Fee	ASP = 1 ANP = 2
3	H.H. The Rajah's College, Pudukkottai	1955	UG, PG, M.PHIL & P.HD.	B = 50120 N = 8 M = 13 J = 33	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU AC = Open SV = REQ	SG UGC	SP = 1 SSP = 1 SNP = 2
4	Periyar E.V.R. College, Tiruchirappalli	1965	UG, PG, M.PHIL & P.HD.	B = 1783 N = 6 M = 15 J = 8	CF = Adequate CP = Oral CG = Highly improved	C = Local CA = Local	AU = IN House AC = Closed SV = REQ	SG UGC	AP = 1 SP = 1

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
5	Rajah Serfoji Government College, Thanjavur	1955	UG, PG, M.PHIL & P.HD.	B = 64230 N = 5 J = 13	CF = Highly adequate CP = No CG = Highly improved	C = DDC CA = Local	AU = Commercial AC = Open SV = REQ	SG UGC User Fee	SP = 1
6	Government Arts College for Women, Puthukottai	1969	UG & PG	B = 50970 N = 7 J = 15	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU AC = Open SV = REQ	SG UGC	AP = 1
7	A.A. Government Arts College, Musiri	1969	UG & PG	B = 53100 N = 6 J = 10	CF = Adequate CP = Written CG = Fairly improved	C = Local CA = Local	AU = NOT AU AC = OPEN SV = REQ	SG UGC	AP = 1
8	Government Arts College, Ayyar Malai	2007	UG & PG	B = 4000 N = 5 J = 13	CF = Adequate CP = No CG = Highly improved	C = LOCAL CA = Local	AU = Commercial AC = Open SV = REQ	SG	APT = 1
9	Government Arts College, Tiruchirappalli	1973	UG & PG	B = 24100 N = 8 J = 15	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU AC = Open SV = REQ	SG UGC	APT= 1
10	M.R.Government Arts College, Mannargudi	1978	UG & PG	B = 74100 N =6 M = 10 J = 13	CF = Adequate CP = Oral CG = Improved	C = Local CA = OPAC	AU = NOT AU AC = Open SV = REQ	SG UGC	AP = 1 ANP = 1

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
11	D.G.Government Arts College for Women, Mayiladuthurai	1967	UG & PG	B = 33150 N = 9 J = 20	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = Commercial AC = Open SV = REQ	SG UGC	SP = 1

(UG = Under Graduate; PG = Post Graduate; B = Book; N = News paper, M = Magazine; J = Journal; CF = Collection Fund; CP = Collection Policy; CG = Collection Growth; C = Classification; CA = Catalogue; AU = Automation; NOT AU = Not Automated; ACC= Access; SV = Stack Verification; SG = State Government; UGC = University Grants Commission; AP = Aided Professional; APT = Aided Professional Teaching, ANP = Aided Non Professional; SP = Self Financing Professional; SSP = Self Financing Semi Professional ; SNP = Self Financing Non Professional)

4.3.2 Status of Government Aided Arts and Science College Libraries affiliated to Bharathidasan University

Table 4.2 presents the details library collection, growth, financial resources, human resources of Government aided Arts and Science college libraries affiliated to Bharathidasan University.

Table 4.2

Status of Government Aided Arts and Science College Libraries affiliated to Bharathidasan University

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
01	A.V.C. College, Mayiladuthurai	1955	UG, PG, M.PHIL & P.HD.	B = 87081 J = 194	CF = Adequate CP = Written CG = Improved	C = CC CA = OPAC	AU =Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 SP = 2 SSP = 2 SNP = 8
02	A.V.V.M. Sri Pushpam College, Poondi	1956	UG, PG, M.PHIL & P.HD.	B = 84327 N = 5 M = 15 J = 150	CF = Highly adequate CP = Written CG=Highly improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = OCC	SG UGC MGT User Fee	AP = 1 ANP = 4 SP = 2 SNP = 15
03	Bishop Heber College, Tiruchirappalli	1966	UG, PG, M.PHIL & P.HD.	B = 96658 N = 5 M = J = 13	CF = Highly adequate CP = Written CG=Highly improved	C = DDC CA = CCC	AU = Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ANP = 1 SP = 4 SSP = 3 SNP = 5
04	Jamal Mohamed College, Tiruchirappalli	1951	UG, PG, M.PHIL & P.HD.	B = 160889 N = 14 J = 73	CF = Adequate CP = No CG = Improved	C = DDC CA = OPAC	AU = Commercial ACC = Closed SV = REQ	SG UGC MGT User Fee	AP =1 SP = 3

S. No.	Name of the college	Year of estd.	Progra mmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
05	Nehru Memorial College, Puthanampatti	1967	UG, PG, M.PHIL & P.HD.	B = 41217 N = 8 J = 84	CF = Adequate CP = Written CG = Improved	C = DDC CC = AACR	AU = Open ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 2 SP = 2 SSP = 3 SNP = 2
06	Poompuhar College, Melaiyur	1964	UG, PG, M.PHIL & P.HD.	B = 23732 N = 7 J = 32	CF = Adequate CP = Oral CG = Improved	C = CC CA = CCC	AU = NOT AU ACC = Open SV = REQ	SG UGC MGT User Fee	ASP = 1 SSP = 2
07	St. Joseph's College, Tiruchirappalli	1844	UG, PG, M.PHIL & P.HD.	B = 160164 J = 122	CF = Adequate CP = Oral CG = Improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = REQ	SG UGC MGT	AP = 2 ASP = 2 SP = 4 SSP = 2 SNP = 1
08	A.D.M. College for Women, Nagapattinam	1975	UG, PG, M.PHIL & P.HD.	B = 33250 N = 10 M = 15 J = 33	CF = Adequate CP = Oral CG = Improved	C = DDC CA = CCC	AU = Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ASP = 2 ANP = 2 SP = 1 SNP = 1
09	Holy Cross College, Tiruchirappalli	1983	UG, PG, M.PHIL & P.HD.	B = 98124 N = 12 M = 15 J = 33	CF = Adequate CP = Written CG = Highly improved	C = UDC CA = WEP OPAC	AU = Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ASP = 2 SP = 14
10	Seethalakshmi Ramaswami College, Tiruchirappalli	1951	UG, PG, M.PHIL & P.HD.	B = 69930 N = 5 M = 4 J = 18	CF = Adequate CP = Oral CG = Improved	C = DDC CA = CCC	AU = In House ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ANP = 1 SP = 1 SNP = 1
11	Dharmapuram Adhinam Arts College, Mayiladuthurai	1946	UG, PG, M.PHIL & P.HD.	B = 44110 N = 5 J = 16	CF = Adequate CP = Oral CG = Improved	C = CC CA = Local	AU = NOT AU ACC = Open SV = REQ	SG UGC MGT	AP = 1 ASP = 1

S. No.	Name of the college	Year of estd.	Progra mmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
12	Ganesar Senthamil College of Arts & Science, Melaisivapuri	1909	UG, PG, M.PHIL & P.HD.	B = 34100 N = 15 J = 23	CF = Adequate CP = Oral CG = Improved	C = CC CA = CCC	AU = NOT AU ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ANP = 1 SP = 1
13	Khadir Mohideen College, Adirampattina m	1955	UG, PG, M.PHIL & P.HD.	B = 73000 N = 6 M = 4 J = 13	CF = Adequate CP = Oral CG = Improved	C = DDC CA = WEB OPAC	AU = Commercial ACC = Open SV = OCC	UGC MGT User Fee	AP = 1 SNP = 1
14	National College, Tiruchirappalli	1919	UG, PG, M.PHIL & P.HD.	B = 86457 N = 15 M = 20 J = 107	CF = Adequate CP = Written CG = Improved	C = DDC CA = OPAC	AU = Commercial ACC = Closed SV = REQ	SG UGC MGT User Fee	AP = 1 ASP = 2 ANP = 3 SSP = 1
15	Rajah's College, Thiruvaiyaru	1881	UG, PG, M.PHIL & P.HD.	B = 54330 N = 7 J = 12	CF = Adequate CP = Oral CG = Improved	C = CC CA = Local	AU = Commercial ACC = Open SV = REQ	SG UGC MGT	AP = 1 SSP = 1 SNP = 1
16	S.K.S.S. Arts College, Thiruppanandal	1945	UG, PG, M.PHIL & P.HD.	B = 33489 N = 7 J = 20	CF = Adequate CP = Oral CG = Improved	C = CC CC =AACR	AU = Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 ASP = 1
17	T.B.M.L. College, Porayar	1972	UG, PG, M.PHIL & P.HD.	B = 68000 N = 10 M = 12 J = 31	CF = Adequate CP = Oral CG = Improved	C = DDC CC =AACR	AU = NOT AU ACC = Open SV = REQ	SG UGC MGT User Fee	ASP = 1 ANP = 1 SP = 1 SSP = 2 SNP = 1
18	Tamilavel Umamaheswar anar Karanthai College, Thanjavur	1911	UG, PG, M.PHIL & P.HD.	B = 19551 N = 4 J = 32	CF = Adequate CP = CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Closed SV = REQ	SG UGC MGT User Fee	SP = 1 SNP = 1

S. No.	Name of the college	Year of estd.	Progra mmes offered	Library collection	CD fund, Policy, Growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
19	Urumu Dhanalakshmi College, Tiruchirappalli	1970	UG, PG, M.PHIL & P.HD.	B = 47670 N = 8 M = 24 J = 33	CF = Adequate CP = Oral CG = Improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	SG UGC MGT User Fee	AP = 1 SP = 2 SSP = 2 SNP = 1

(UG = Under Graduate; PG = Post Graduate; B = Book; N = News paper, M = Magazine; J = Journal; CF = Collection Fund; CP = Collection Policy; CG = Collection Growth; C = Classification; CA = Catalogue; AU = Automation; NOT AU = Not Automated; ACC= Access; SV = Stack Verification; SG = State Government; UGC = University Grants Commission; AP = Aided Professional; APT = Aided Professional Teaching, ANP = Aided Non Professional; SP = Self Financing Professional; SSP = Self Financing Semi Professional ; SNP = Self Financing Non Professional)

4.3.3 Status of Self Finance Arts and Science College Libraries affiliated to Bharathidasan University

Table 4.3 presents the status of Self Finance Arts and Science College Libraries affiliated to Bharathidasan University.

Table 4.3

Status of Self Finance Arts and Science College Libraries affiliated to Bharathidasan University

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
01	Annai College of Arts & Science, Thanjavur	2000	UG & PG	B = 7000 N = 6 M = 15 J = 20	CF = Adequate CP = Oral CG = Improved	C = CC CA = OPAC	AU = Commercial ACC = Open SV = OCC	MGT User Fee	SP = 5 SNP = 1
02	Shrimati Indira Gandhi College, Tiruchirappalli	1984	UG, PG & M.PHIL	B = 27000 N = 6 J =14	CF = Adequate CP = Written CG = Improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	UGC MGT	SP = 3 SSP = 3 SNP = 4
03	Srinivasan College of Arts and Science, Perambalur	2005	UG & PG	B = 13000 N = 10 J = 45	CF = Adequate CP = Written CG = Highly improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 3 SSP = 2 SNP = 1
04	Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur	1996	UG, PG, M.PHIL & P.HD.	B = 37899 N = 10 M = 54 J = 55	CF = Highly Adequate CP = Written CG = Highly improved	C = DDC CA = WEB OPAC	AU = Commercial ACC = Open SV = OCC	UGC MGT User Fee	SP = 4 SSP = 2 SNP = 2

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
05	Sri Saradha College for Women, Perambalur		UG & PG	B = 8000 N = 4 J = 50	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1
06	J.J. College of Arts and Science, PudhuKottai	1994	UG, PG, M.PHIL & P.HD.	B = 22182 N = 8 M = 42 J = 126	CF = Highly Adequate CP = No CG = Highly improved	C = DDC CA = OPAC	AU = Open ACC = Open SV = REQ	UGC MGT User Fee	SP = 1 SSP = 6 SNP = 2
07	Bon Secours College for Women, Thanjavur	2002	UG & PG	B = 3500 N = 3 M = 5 J = 34	CF = Adequate CP = Written CG = Highly improved	C = DDC CA = OPAC	AU = Open ACC = Open SV = REQ	MGT User Fee	SP = 2 SSP = 1 SNP = 1
08	Aadhavan Arts and Science College,Tiruchirappalli	2010	UG	B = 2150 N = 4 M = 2 J = 2	CF = Adequate CP = Oral CG = Improved	C = DDC CA = OPAC	AU = Open ACC = Open SV = OCC	MGT User Fee	SP = 1 SNP = 1
09	Sengamala Thayaar Educational Trust Women-s College, Mannargudi	1994	UG, PG, M.PHIL & P.HD.	B = 14310 N = 5 J = 8	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU AC C= Open SV = REQ	MGT User Fee	SP = 2 SSP = 2 SNP = 1
10	Cauvery College for Women, Tiruchirappalli	1984	UG, PG, M.PHIL & P.HD.	B = 18000 N = 9 J = 173	CF = Adequate CP = Oral CG = Highly improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 5 SNP = 3

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
11	M.I.E.T. Arts & Science College,Tiruchirappalli	1994	UG & PG	B = 36110 N = 9 J = 67	CF = Adequate CP = Written CG = Improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 2 SSP = 1 SNP = 1
12	Paventhar Bharathidasan College of Arts & Science, Pudukkottai	1998	UG, PG & M.PHIL	B = 16780 N = 5 M = 5 J = 5	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = Open ACC = Open SV = OCC	MGT User Fee	SP = 1 SSP = 1 SNP = 1
13	Srimad Andavan Arts & Science College,Tiruchirappalli	1996	UG, PG, M.PHIL & P.HD.	B =19000 N = 12 M = 7 J = 50	CF = Adequate CP = Written CG = Highly improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 3 SNP = 2
14	Nallikuppusamy Arts College, Thanjavur	1997	UG	B = 5013 N = 4 M = 20 J = 25	CF = Adequate CP = Written CG = Highly improved	C = Local CA = Local	AU = NOT AU ACC = Open SV = OCC	MGT	SP = 1 SSP = 1 SNP = 1
15	Navalar Na. Mu. Venkatasamy Nattar, Thanjavur	1992	UG	B = 3250 N = 4 M = 2 J = 2	CF = Adequate CP = Oral CG = Improved	C = CC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SNP = 1
16	Chidambaram Pillai College for Women,Tiruchirappalli	1999	UG, PG, M.PHIL & P.HD.	B = 6659 N = 8 M = 10 J = 6	CF = Adequate CP = No CG = Fairly improved	C = CC CA = OPAC	AU = Commercial ACC = Open SV = OCC	MGT User Fee	SP = 2 SNP = 2

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
17	Kurinji College of Arts and Science,Tiruchirappalli		UG, PG & M.PHIL	B = 5935 N = 4 M = 36 J = 8	CF = Adequate CP = Written CG = Improved	C = DDC CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2 SNP = 1
18	Christhu Raj College, Tiruchirappalli	1997	UG & PG	B = 11200 N = 6 M = 2 J = 20	CF = Adequate CP = No CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 3 SNP = 1
19	A.R.C. Viswanathan College, Nagapattinam	2000	UG, PG & M.PHIL	B = 3000 N = 4 M = 2 J = 5	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1
20	Arputha College of Arts & Science, Vamban	1999	UG & PG	B = 4150 N = 4 J = 2	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT	SP = 1 SNP = 1
21	Arungarai Amman College of Arts & Science, Karur	2001	UG & PG	B = 2200 N = 4 J = 3	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Closed SV = REQ	MGT	SP = 1 SSP = 1
22	Kongu College of Arts & Science, Karur	1997	UG, PG, M.PHIL & P.HD.	B = 6270 N = 5 M = 8 J =19	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1 SNP = 2
23	MASS College of Arts and Science, Kumbakonam	2005	UG & PG	B = 3785 N = 4 J = 10	CF = Highly Adequate CP = Oral CG = Highly improved	C = DDC CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1 SNP = 1

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
24	Rajagiri Dawood Batcha College of Arts & Science, Thanjavur	1999	UG & PG	B = 2150 N = 6 M = 6 J = 7	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU ACC = Open SV = OCC	MGT	SP = 1 SNP = 1
25	Bharath College of Science & Management, Thanjavur	2000	UG, PG & M.PHIL	B = 18700 N = 4 M = 8 J = 15	CF = Adequate CP = Oral CG = Improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = OCC	MGT User Fee	SP = 1 SSP = 1 SNP = 1
26	Swami Vivekananda Arts & Science College, Thanjavur	2000	UG & PG	B = 1900 N = 4 J = 5	CF = In Adequate CP = Oral CG = fairlyimproved	C = Local CA = Local	AU = NOT AU ACC = Open SV = OCC	MGT	SP = 1 SNP = 1
27	Adaikala Matha College, Thanjavur	1988	UG & PG	B = 25155 N = 9 J = 23	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2 SNP = 2
28	Naina Mohamed College of Arts & Science, Pudukkottai	1997	UG & PG	B = 7800 N = 8 M = 5 J =10	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1 SNP = 1
29	Enathi Rajappa College of Arts & Science, Pattukkottai	1999	UG, PG & M.PHIL	B = 5900 N = 7 M = 5 J =5	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
30	Idhaya College of Women, Kumbakonam	2000	UG, PG & M.PHIL	B = 1600 N = 5 M = 7 J = 4	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1
31	Valluvar College of Science and Management, Karur	2004	UG & PG	B = 2150 N = 6 J = 5	CF = Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT	SP = 1 SNP = 1
32	Thanthai Hans Roever College, Perambalur	1969	UG, PG & M.PHIL	B = 17000 N = 6 M = 5 J = 14	CF = Adequate CP = Oral CG = Improved	C = DDC CA = OPAC	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 3 SNP = 2
33	Meenakshi Ramasamy Arts and Science College, Udaiyarpalayam	1998	UG, PG & M.PHIL	B = 4770 N = 5 M = 6 J = 12	CF = Adequate CP = Oral CG = Improved	C = Local CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2
34	Nethaji Subash Chandra Bose College, Thiruvarur	2000	UG, PG & M.PHIL	B = 1100 N = 5 J = 10	CF = Adequate CP = Written CG = Highly improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1 SNP = 2
35	Cambridge College of Arts and Science, Karur	2006	UG	B = 1400 N = 4 J =2	CF = In Adequate CP = Oral CG = Improved	C = Local CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT	SP = 1

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
36	Chettinad College of Arts & Science, Tiruchirappalli	2000	UG & PG	B = 5100 N = 6 M = 5 J =8	CF = Adequate CP = Written CG = Highly improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2
37	Auxilium College of Arts and Science for Women, Alangudi	2007	UG	B = 2700 N = 5 M = 3 J = 5	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT	SP = 1 SNP = 1
38	Rabiammal Ahamed Maideen College for Women Thiruvarur	1999	UG & PG	B = 5400 N = 7 J = 8	CF = Adequate CP = Written CG = Improved	C = DDC CC = AACR	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 1 SNP = 2
39	Sri Venkateshwara College of Arts & Science, Peravurani	1999	UG, PG & M.PHIL	B = 3400 N = 4 M = 5 J =9	CF = Adequate CP = Oral CG = Improved	C = DDC CA = Local	AU = Commercial ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2
40	Aiman College of Arts & Science for Women, Tiruchirappalli	2000	UG & PG	B = 23000 N = 7 M = 3 J =14	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2 SNP = 1
41	Imayam College of Arts & Science, Thuraiyur	2004	UG & PG	B = 12050 N = 4 M = 6 J = 14	CF = Adequate CP = Oral CG = Improved	C = DDC CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2
42	Deen College of Arts and Science, Nagapattinam	2010	UG	B = 2600 N = 6 M = 3 J = 4	CF = Adequate CP = Oral CG = Improved	C = DDC CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP =3

S. No.	Name of the college	Year of estd.	Programmes offered	Library collection	CD fund, CD policy CD growth	Technical processing	Automation, Access, Stock verification	Financial resources	Human resources
43	Edayathangudi G.S. Pillai Arts & Science College, Nagapattinam	1995	UG & PG	B = 3270 N = 5 M = 2 J =6	CF = Adequate CP = Written CG = Improved	C = DDC CC = AACR	AU = NOT AU ACC = Open SV = REQ	MGT User Fee	SP = 1 SSP = 2 SNP = 1
44	Meenakshi Ramasamy Arts and Science College, Ariyalur	2001	UG, PG & M.PHIL	B = 13200 N = 5 M = 4 J =8	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = Not Automated ACC = Open SV = REQ	MGT User Fee	SP = 2 SNP = 1
45	Sri Sarada Niketan College of Science for Women, Karur	1997	UG & PG	B = 4180 N = 5 J = 5	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = Commercial ACC = Closed SV = REQ	MGT User Fee	SP = 2 SNP = 1
46	S.K. College of Arts and Science, Mannargudi	2007	UG & PG	B = 1900 N =6 M =2 J =5	CF = In Adequate CP = Oral CG = fairly improved	C = DDC CA = Local	AU = NOT AU ACC = CLOSED SV = REQ	MGT User Fee	SP = 1 SSP = 1
47	Annai Vailankanni Arts &Science College, Thanjavur	2009	UG & PG	B = 10000 N = 9 J = 10	CF = Adequate CP = Written CG = Improved	C = DDC CA = Local	AU = NOT AU ACC = Open SV = OCC	MGT	SP = 1

(UG = Under Graduate; PG = Post Graduate; B = Book; N = News paper, M = Magazine; J = Journal; CF = Collection Fund; CP = Collection Policy; CG = Collection Growth; C = Classification; CA = Catalogue; AU = Automation; NOT AU = Not Automated; ACC= Access; SV = Stack Verification; SG = State Government; UGC = University Grants Commission; AP = Aided Professional; APT = Aided Professional Teaching, ANP = Aided Non Professional; SP = Self Financing Professional; SSP = Self Financing Semi Professional ; SNP = Self Financing Non Professional)

4.4 INFERENCES

Out of 77 colleges, Nine colleges (Government = 4, Government Aided = 1 and Self finance = 4) have not separate collection development policy.

Regarding information source collection, Government Arts College, Kumbakonam have a good number of collection in government college libraries, seven Government aided colleges have more than 80000 books in their libraries and Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur has highest number of collections in Self finance college libraries.

Regarding Classification system in Government colleges, one government college adopted DDC classification system and ten colleges adopted local classification system. Government aided college, six colleges are classified information sources based on colon classification system, twelve colleges have adopted DDC and one college have adopted UDC system and majority of the Self finance colleges (thirty five) classified information sources based on DDC. Nine Government Colleges, sixteen Government Aided colleges and forty four Self finance colleges are following open access system to the users and two Government , three Government aided and three Self finance colleges are adapting closed access system. Eleven Government, seventeen Government aided colleges and thirty seven Self finance colleges are regularly carrying out stack verification.

Six Government colleges, fourteen Government aided colleges and nineteen Self finance colleges are automated their services. Two Government aided and one Self finance college library provides WEB-OPAC.

Government and Government aided colleges are getting financial assistance from state government and University Grants Commission. Two self finance colleges i.e. J.J.

College of Arts and Science, Pudhukottai and Shrimati Indira Gandhi College, Tiruchirappalli are getting financial assistance from U.G.C under section 2 (f) & 12(B) of the UGC Act 1956.

Related to human resources, A.V.V.M. Sri Pushpam College and Holy Cross College have more number of library professionals.

CHAPTER V

DATA ANALYSIS AND INTERPRETATION

In this chapter, the data collected from the 77 librarians and 400 users of Arts and Science Colleges affiliated to Bharathidasan University through questionnaire method have been analysed and interpreted by using various statistical tools and techniques. The data analysis for this study is presented in two sections, correspondingly to verify the hypotheses framed in line with the objectives framed for the study. The first section (A) Analyses the librarians' opinion related to Information Resource Management and section (B) Analyses user's opinion related to Information Resource Management.

The analysis has been done under the following headings namely

Section A Librarians

- Personal information about the librarians
- Book selection tools
- Method of acquiring information sources
- Communication methods to acquire information sources
- Barriers to acquire information sources
- Collection development
- Library services
- Security measures taken in the library
- Self-appraisal of Information Resource Management (IRM) skills among librarians
- Evaluation methods adopted to evaluate the collection

Section B Users

- Personal information about the users
- Purpose of users who use the library
- Usage of reading materials among users
- Order of preferences given to overall library facilities by users
- Difficulties faced in using library sources and services by the users.

Descriptive analysis of data in terms of frequency distribution and percent analysis is carried out and presented. Differential analysis has been done in terms of statistical techniques such as Chi-square test, Reliability Analysis, Cluster Analysis, and Proximity Matrix. Some tables have been represented in the form of graphs and diagrams for making the data analysis clear.

Sample Size

The questionnaires were distributed to the Librarians working in 106 Arts and Science Colleges affiliated to Bharathidasan University. A total of 106 questionnaires were distributed, out of which, 77 filled in questionnaires were received and the response rate is found to be 72.64 %.

5. 1 LIBRARIAN'S VIEW OF INFORMATION RESOURCE MANAGEMENT

5.1.1 DEMOGRAPHIC DATA

The data collected from the librarians were further grouped into eight categories such as *"Gender", "Age", "Experience" "Qualification", "Types of Institution"* , *"Location", "Year of establishment"* and *"Courses offered"* and the same is shown in Table 5.1 .

Table 5.1

Demographic Profile of the Librarians

S. No.	Description		Responses	Percentage
1	Gender	Male	41	53.2
		Female	36	46.8
2	Age	Below 35	27	35.1
		36-45	34	44.2
		46 and above	16	20.8
3	Experience	Below 5 years	29	37.7
		5 to 10 years	24	31.2
		Above 10 Years	24	31.2
4	Educational qualification of librarians	M.L.I. Sc.	14	18.2
		M. Phil.	55	71.4
		Ph .D.	8	10.4

S. No.	Description		Responses	Percentage
5	Types of institution	Government	11	14.3
		Government Aided	19	24.7
		Self financing	47	61.0
6	Location	Rural	39	50.6
		Semi urban	16	20.8
		Urban	22	28.6
7	Year of Establishment	Below 1950	10	13.0
		1951 to 1970	18	23.4
		1971 to 1991	6	7.8
		1991 to 2000	27	35.1
		Above 2001	16	20.8
8	Courses offered	UG only	6	7.79
		UG and PG	28	36.36
		UG, PG and M. Phil.	14	18.18
		UG, PG , M.Phil. . and Ph. D.	29	37.66

It is found from Table 5.1 that among the respondents, 53.2 percent of librarians are male and 46.8 percent of librarians are female. Further, 35.1 percent of librarians are below 35 years of age, 44.2 percent belong to the age group of 36-45 years and 20.8 percent belong to the age group of 46 and above years. Regarding experience, 37.7 percent of the respondents had below 5 years experience in the field of Library Science and equal number of respondents (31.2%) has an experience of 5 to 10 years and above 10 years. It is noted that 71.4 percent of librarians have M.Phil.. Qualification, 18.2 percent of the librarians have M.L.I.Sc. qualification and 10.4 percent of the librarians have Ph.D qualification. It is found that 61 percent of librarians are working in Self Financing Colleges, 24.7 percent of the librarians are working in Government Aided Colleges and 14.3 percent of the librarians are working in Government Colleges. In the case of location of the institution, 50.6 percent of the respondents are from rural area, 28.6 percent are from urban locality and 20.8 percent are from semi urban area. It is found that 37.66 percent of colleges are offering courses at all levels (UG, PG, M.Phil. and Ph.D.), 18.18 percent of colleges are offering upto M.Phil. Level courses, 36.6 percent of colleges are offering both Undergraduate level

courses and Post Graduate and 7.79 percent of colleges are offering Undergraduate courses only.

It is inferred that majority of the respondents have research qualification (i.e. M.Phil. and Ph.D.), higher percent of librarians belong to the age group of 36- 45 years and half of the respondents are working in institutions located in rural areas.

5.1.2 BOOK SELECTION TOOLS

The study analysed book selection tool used by the librarian respondents. Five tools were identified and analysed on nominal scale. The mean and standard deviation are calculated and ranks are also assigned. The weightage is assigned from the least to the highest and the same is shown in the Table 5.2.

Table 5.2

Book Selection Tools

S. No.	Description	Responses	Mean	SD	Rank
1	Bibliography	35 45.5%	1.55	0.50	3
2	Books in print	14 18.2%	1.82	0.39	5
3	Publishers catalogue	70 90.9%	1.09	0.29	1
4	Subject list	38 49.4%	1.51	0.43	2
5	Web OPAC	16 20.8%	1.79	0.50	4

(SD = Standard deviation)

It is inferred from the table 5.2 that 90.9 percent of the librarians used Publishers' catalogue for book selection and this was ranked first , Subject lists (Syllabus references) (49.4%) are used as the second level followed by Bibliography (45.5%). Web OPAC (20.8%) and Books in print (18.2%) are used by less number of librarians.

Table 5.2 shows that majority of the librarians are using publishers catalogue as a book selection tool and Books in print are used as the least book selection tool.

5.1.2.1 Book Selection Tools Vs Gender

The study is ascertained by gender. The mean and standard deviation are calculated and based on the calculation the ranks are assigned. The same is shown in Table 5.3

Table 5.3
Book Selection Tools Vs Gender

S. No.	Description	Male n = 41				Female n = 36			
		Responses	Mean	SD	Rank	Responses	Mean	SD	Rank
1	Bibliography	23 56.1%	1.44	0.50	2	12 33.3%	1.67	0.48	3
2	Books in print	9 22%	1.78	0.42	4	5 13.9%	1.86	0.35	5
3	Publishers catalogue	37 90.2%	1.10	0.30	1	33 91.7%	1.08	0.28	1
4	Subject list	22 53.7%	1.46	0.50	3	16 44.4%	1.56	0.50	2
5	Web OPAC	6 14.6%	1.85	0.36	5	10 27.8%	1.72	0.45	4

It can be seen from the table 5.3 that higher percent of the male librarians preferred Bibliography (56.1%), Books in print (22%) and Subject list (53.7%) to book selection when compared to female (33.3%, 13.9% and 44.4% respectively) librarians. Higher percent of female librarians preferred Publishers' catalogue (91.7%) and Web OPAC (27.8%) when compared to the male (90.2% and 14.6% respectively) librarians.

It is found from the table 5.3 that majority of the male and female librarians used Publishers catalogue for book selection. The male librarians preferred Web OPAC as the least tool for book selection whereas the female librarians preferred Books in print.

5.1.2.2 Book Selection Tools Vs Experience

Book selection tools is further analysed among experience of the librarians on nominal scale. The mean and standard deviation are calculated and ranks are allotted based on the mean. The same is shown in Table 5.4

Table 5.4
Book Selection Tools Vs Experience

S. No.	Description	Below 5 years n = 29				5 -10 years n = 24				Above 10 years n = 24				Chi square
		Responses	Mean	SD	R	Responses	Mean	SD	R	Responses	Mean	SD	R	
1	Bibliography	12 41.4%	1.59	0.50	3	12 50%	1.50	0.51	2	11 45.8%	1.54	0.51	2	0.396
2	Books in print	3 10.3%	1.90	0.31	5	7 29.2%	1.71	0.46	4	4 16.7%	1.83	0.38	5	3.181
3	Publishers catalogue	25 86.2%	1.14	0.35	1	22 91.7%	1.08	0.28	1	23 95.8%	1.04	0.20	1	1.497
4	Subject list	17 58.6%	1.41	0.50	2	11 45.8%	1.54	0.51	3	10 41.7%	1.58	0.50	3	1.683
5	Web OPAC	5 17.2%	1.83	0.38	4	4 16.7%	1.83	0.38	5	7 29.2%	1.71	0.46	4	1.493

(R = Rank)

It is seen from the table 5.4 that librarians with an experience of 5 -10 years (50%) and above 10 years (45.8%) have preferred Bibliography to book selection in the second rank whereas the librarians with below 5years (41.4%) experience are ranked the third. Books in print are used as a book selection tool among the librarians with an experience of below 5years (10.3%) and Above 10 years (16.7%) and they are ranked the fifth whereas the librarians with 5 -10 years (29.2%) experience get the fourth rank. Publishers' catalogue is the most preferred tool for book selection among the librarians with below 5 years (86.2%), 5 -10 years (91.7%) and Above 10 years (95.8%) experience. Subject list tool is preferred by the librarians with an experience of Below 5 years (58.6%) in the second rank when compared to librarians with 5 -10 years (45.8%) and Above 10 years (41.7%) experience. Web OPAC of other libraries has been used as a book selection tool among the librarians with an experience below 5years (17.2%) and Above 10 years (16.7%) are ranked as the fourth whereas librarians with 5 -10 years (29.2%) experience get the fifth rank.

The Chi-Square test was thus administered to test significant difference between experience of librarians and the use of book selection tools. The calculated value 3.181 is less than the table value of 5.991 for degrees of freedom four at .05 significance level. Therefore, it is inferred that there is significant difference between experience of librarians and the use of book selection tools and the hypothesis is disproved.

It can be observed from the table 5.4 that majority of the librarians used Publishers catalogue for acquiring information sources for their libraries and Use the Books in print is the least method among the librarians with an experience Below 5 years and Above 10 years whereas librarians with an experience of 5 -10 years experience have used Web OPAC as the least.

5. 1.3 BOOK SELECTION METHODS

Five ways of book selection methods were identified and analysed on nominal scale such as *"Head of the Department (HOD)", "Faculty", "Library Staff", "Students" and "Management".* Mean and Standard deviation are calculated and ranks are assigned based on the mean. The weightage is assigned from the least to the highest and the same is given in Table 5.5.

Table 5.5

Book Selection Methods

S. No.	Description	Responses	Mean	SD	Rank
1	Head of the Department (HOD)	73 94.8%	1.05	0.22	1
2	Faculty	61 79.2%	1.21	0.41	2
3	Library Staff	30 39%	1.61	0.49	5
4	Students	57 74%	1.26	0.44	3
5	Management	38 49.4%	1.51	0.50	4

Table 5.5 shows that 94.8 percent of libraries are getting suggestions from the Head of the Department and 79.2 percent of librarians also collect views of Faculty members to select the documents. It reveals that 74 percent of librarians are also collecting suggestions from students to select the documents. 49.4 percent of College authorities (Management) are involved in book selection process. Further it reveals that Library staffs (39 %) also suggest documents that are to be acquired. The standard deviation ranges from 0.22 to 0.50. **Cabonero** and **Mayrena** (2012) found similar results that faculty members moderately participate in the selection of information sources through recommending recent and relevant titles of library resources in line with their field of expertise.

The Head of the Department is the key person involved in selection of the documents needed for the library based on the curriculum. It is followed by Faculty members of the department and Students. Library Staff also suggest the documents based on the users' need and usage at the least level in the book selection.

5. 1.3.1 Book Selection Methods Vs Gender

Book selection methods is analysed among male and female librarians on nominal scale. The mean and standard deviation are calculated and ranks are assigned based on the mean. The same is shown in Table 5.6

Table 5.6

Book Selection Methods Vs Gender

S. No.	Description	Male n = 41				Female n = 36			
		Responses	Mean	SD	Rank	Responses	Mean	SD	Rank
1	Head of the Department (HOD)	38 92.7%	1.07	0.26	1	35 97.2%	1.03	0.17	1
2	Faculty	33 80.5%	1.20	0.40	2	28 77.8%	1.22	0.42	2
3	Library Staff	13 31.7%	1.68	0.47	5	17 47.2%	1.53	0.51	5
4	Students	30 73.2%	1.27	0.45	3	27 75%	1.25	0.44	3
5	Management	20 48.8%	1.51	0.51	4	18 50%	1.50	0.51	4
	Mean (∑mean/ n)		1.35				1.31		

It can be seen from the table 5.6 that 97.2 percent of the Head of the Department (HOD) who are highly involved in book selection process are female librarians working in the institutions whereas 92.7 percent of the Heads of the Department (HOD) who are highly involved in book selection process are male librarians working in the institutions. Higher percent of Faculty members who participate in the book selection process are male librarians (80.5%) rather than libraries in which female librarians (77.8%) work. It reveals that the participation of students in the book selection slightly varies in libraries where male librarians (73.2%) and female librarians (75%) work. It also reveals that college Management participated in the library book selection process where male (48.8%) and female (50%) librarians worked. It is observed from the table that 47.2 percent of Library staff members suggested library documents under the leadership of female librarians than male librarians (31.7%).

It is inferred that among male and female librarians, the first rank is occupied by the Head of the Department who is involved in the selection of the documents needed in the library. It proves that there is a slight difference in deviation on the basis of gender factor in the Book selection process.

5. 1.3.2 Book Selection Methods Vs Types of Institution

Book selection methods is analysed on the types of institution on nominal scale. The mean and standard deviation are calculated and ranks are assigned based on the above. The same is shown in Table 5.7.

Table 5.7

Book Selection Methods Vs Types of Institution

S. No.	Description	Government n = 11				Government aided n = 19				Self finance n = 47			
		RE	M	SD	R	RE	M	SD	R	RE	M	SD	R
1	Head of the Department (HOD)	10 90.9%	1.09	0.30	1	18 94.7%	1.05	0.23	1	45 95.7%	1.04	0.20	1
2	Faculty	6 54.5%	1.45	0.52	2	16 84.2%	1.16	0.37	2	39 83%	1.17	0.38	2
3	Library Staff	2 18.2%	1.82	0.40	5	10 52.6%	1.47	0.51	3	18 38.3%	1.62	0.49	5
4	Students	3 27.3%	1.73	0.47	4	16 84.2%	1.16	0.37	2	38 80.9%	1.19	0.40	3
5	Management	5 45.5%	1.55	0.52	3	6 31.6%	1.68	0.48	5	27 57.4%	1.43	0.50	4

(RE = Responses; M = Mean; R = Rank)

It is found from the table 5.7 that higher percent of Faculty members (84.2%), Library staff members (52.6%) and Students (84.2%) are involved in the book selection process in Government Aided colleges when compared to their corresponding counterparts in Government (54.5%, 18.2% and 27.3% respectively) and Self finance colleges (83%, 38.3% and 80.9% respectively) . It is further observed that Heads of the Department (95.7%) and Managements (57.4%) of Self finance colleges highly participate in book selection process when compared to their corresponding counterparts in Government (90.9% and 45.5% respectively) and Government aided colleges (94.7% and 31.6% respectively).

The Head of the Department and Faculty members play a key role in book selection process in Government, Government Aided and Self finance college libraries. It is followed by the college Management in Government colleges, Library staff in Government Aided colleges and Students in Self finance colleges. At the least level of book selection process, Library staffs participate in Government and Self Finance colleges where as it is the College management in Government Aided Colleges.

5. 1.4 ACQUIRING INFORMATION SOURCES

Acquiring information sources is a core activity of all libraries and its objective is to build up information sources in conformity with the objectives of the parent institution to meet the information requirements of the users. Seven methods were identified and analysed on five point scale such as "*Always*", "*Often*", "*Sometimes*", "*Rarely*" and "Never. The weightage is assigned from the least to the highest and the same is given in the Table 5.8.

Table 5.8

Acquiring Information Sources

S. No.	Description	Always	Often	Sometimes	Rarely	Never	Mean	SD	Rank
1	Standing vendor	31 40.3%	15 19.5%	18 23.4%	4 5.2%	9 11.7%	2.29	1.36	2
2	Visiting Book shop	26 33.8%	14 18.2%	6 7.8%	25 32.5%	6 7.8%	2.62	1.43	4
3	Inviting book sellers	42 54.5%	15 19.5%	14 18.2%	2 2.6%	4 5.2%	1.84	1.14	1
4	Approval method	25 32.5%	19 24.7%	11 14.3%	14 18.2%	8 10.4%	2.49	1.38	3
5	Quotations	23 29.9%	13 16.9%	12 15.6%	12 15.6%	17 22.1%	2.83	1.55	6
6	Organizing book exhibitions	26 33.8%	11 14.3%	11 14.3%	20 26.0%	9 11.7%	2.68	1.46	5
7	Visiting book fairs /festivals/ exhibitions	19 24.7%	9 11.7%	17 22.1%	18 23.4%	14 18.2%	2.99	1.45	7

It is found from table 5.8 that 54.5 percent of librarians always invite book sellers to acquire information sources for the library. It is followed by Standing Vendor (40.3%), Visiting book shops (33.8%), Organizing book exhibitions (33.8%), Approval method (32.5%) and Quotations (29.9%). It is noticed that 23.4 percent of librarians rarely used visiting book fairs, festivals, exhibitions to acquire information sources.

Majority of the librarians are acquiring information sources for library by means of Inviting book sellers and it is followed by Standing vendor and Approval method. At the least level, information sources are acquired by librarians by visiting book fairs and exhibitions.

5. 1.4.1 Acquiring Information Sources Vs Gender

Acquiring information sources is analysed among the male and female librarians on five point scale. The mean and standard deviation are calculated and the ranks are assigned. The same is shown in Table 5.9.

Table 5.9

Acquiring Information Sources Vs Gender

S. No.	Description	Male n = 41								Female n = 36							
		A	O	S	RA	N	M	SD	R	A	O	S	RA	N	M	SD	R
1	Standing vendor	14 34.1%	8 19.5%	9 22%	3 7.3%	7 17.1%	2.54	1.47	4	17 47.2%	7 19.4%	9 25%	1 2.8%	2 5.6%	2.00	1.17	2
2	Visiting Book shop	15 36.6%	7 17.1%	3 7.3%	13 31.7%	3 7.3%	2.56	1.45	3	11 30.6%	7 19.4%	3 8.3%	12 33.3%	3 8.3%	2.69	1.43	5
3	Inviting book sellers	23 56.1%	6 14.6%	8 19.5%	1 2.4%	3 7.3%	1.90	1.24	1	19 52.8%	9 25%	6 16.7%	1 2.8%	1 2.8%	1.78	1.02	1
4	Approval method	15 36.6%	8 19.5%	6 14.6%	7 17.1%	5 12.2%	2.49	1.45	3	10 27.8%	11 30.6%	5 13.9%	7 19.4%	3 8.3%	2.50	1.32	3
5	Quotations	14 34.1%	6 14.6%	7 17.1%	4 9.8%	10 24.4%	2.76	1.61	6	9 25.0%	7 19.4%	5 13.9%	8 22.2%	7 19.4%	2.92	1.50	7
6	Organizing book exhibitions	16 39%	6 14.6%	5 12.2%	8 19.5%	6 14.6%	2.56	1.53	5	10 27.8%	5 13.9%	6 16.7%	12 33.3%	3 8.3%	2.81	1.39	4
7	Visiting book fairs / festivals /exhibitions	10 24.4%	2 4.9%	12 29.3%	9 22%	8 19.5%	3.07	1.44	2	9 25%	7 19.4%	5 13.9%	9 25%	6 16.7%	2.89	1.47	6

(A=Always; O= Often; S= Sometimes; RA = Rarely; N= Never; M = Mean; R= Rank)

It is found from table 5.9 that Standing vendor (47.2 %) and Visiting book fairs, festivals and exhibitions (25%) are always used in acquiring information sources by female librarians when compared to male librarians (34.1% and 24.4%. respectively). It further indicates that a greater percent of librarians who always acquire information sources through Visiting Book shop (36.6%), Inviting book sellers (56.1%), Approval method (36.6%), Quotations (34.1%) and Organizing book exhibitions (39%) are males when compared to female librarians (30.6%, 52.8%, 27.8%, 25% and 27.8% respectively).The standard deviation is less than 2 and it ranges from 1.02 to 1.61.

Male and female librarians always invite sellers to library for acquiring information sources is ranked first. Quotations method is the least preferred method among male and female librarians.

5. 1.4.2 Acquiring Information Sources Vs Location

Acquiring information sources is further analysed on the basis of location of library on five point scale. The mean and standard deviation are calculated and the ranks are assigned. The same is presented in Table 5.10.

Table5.10

Acquiring Information Sources Vs Location

S. No.	Description	Rural n = 39								Semi urban n = 16								Urban n = 22								Chi-square
		A	O	S	RA	N	M	SD	R	A	O	S	RA	N	M	SD	R	A	O	S	RA	N	M	SD	R	
1	Standing vendor	19 48.7%	4 10.3%	8 20.5%	2 5.1%	6 15.4%	2.28	1.50	4	7 43.8%	5 31.3%	3 18.8%	1 6.3%	0 .0%	1.88	0.96	2	5 22.7%	6 27.3%	7 31.8%	1 4.5%	3 13.6%	2.59	1.30	2	9.352
2	Visiting Book shop	13 33.3%	10 25.6%	2 5.1%	9 23.1%	5 12.8%	2.56	1.48	3	5 31.3%	2 12.5%	1 6.3%	7 43.8%	1 6.3%	2.81	1.47	6	8 36.4%	2 9.1%	3 13.6%	9 40.9%	0 .0%	2.59	1.37	4	9.120
3	Inviting book sellers	21 53.8%	7 17.9%	5 12.8%	2 5.1%	4 10.3%	2.00	1.36	1	11 68.8%	3 18.8%	2 12.5%	0	0	1.44	0.73	1	10 45.5%	5 22.7%	7 31.8%	0	0	1.86	0.89	1	10.096
4	Approval method	13 33.3%	8 20.5%	6 15.4%	7 17.9%	5 12.8%	2.56	1.45	2	5 31.3%	3 18.8%	3 18.8%	4 25%	1 6.3%	2.56	1.37	3	7 31.8%	8 36.4%	2 9.1%	3 13.6%	2 9.1%	2.32	1.32	3	3.592
5	Quotations	14 35.9%	4 10.3%	7 17.9%	5 12.8%	9 23.1%	2.77	1.61	5	4 25%	4 25%	2 12.5%	4 25%	2 12.5%	2.75	1.44	4	5 22.7%	5 22.7%	3 13.6%	3 13.6%	6 27.3%	3.00	1.57	7	5.458
6	Organizing exhibitions	13 33.3%	9 23.1%	5 12.8%	6 15.4%	6 15.4%	2.56	1.48	3	7 43.8%	1 6.3%	2 12.5%	5 31.3%	1 6.3%	2.50	1.51	7	6 27.3%	1 4.5%	4 18.2%	9 40.9%	2 9.1%	3.00	1.41	5	10.104
7	Visiting book fairs, festivals and exhibitions	8 20.5%	4 10.3%	9 23.1%	9 23.1%	9 23.1%	3.18	1.45	2	5 31.3%	3 18.8%	1 6.3%	6 37.5%	1 6.3%	2.69	1.45	5	6 27.3%	2 9.1%	7 31.8%	3 13.6%	4 18.2%	2.86	1.46	6	8.297

(A=Always; O= Often; S= Sometimes; RA = Rarely; N= Never; M = Mean; R= Rank)

The results in table 5.10 show that in rural libraries, 53.8 percent of the librarians always invite booksellers followed by Standing vendor (48.7 %), Quotations (35.9 %) and equal number of response (33.3%) was received for the remaining methods i.e. Visiting book shop, Approval method and Organizing book exhibitions. Further table 5.10 shows that 68.8 percent of the semi urban college librarians always invited book sellers, 43. 8 percent of the librarians always preferred Standing vendor and Organizing exhibitions followed by Visiting book shop (31.3%), Approval method (31.3%) and Visiting book fairs, festivals and exhibitions (31.3%) and Inviting quotations (25%).45.5 percent of urban college librarians always invited book sellers to library for acquiring information sources. 27.3 percent of urban college librarians never employed quotations method .

Table 5.10 reveals that acquiring information sources by means of Inviting sellers is always preferred among the librarians who are working in rural institutions. It is followed by Approval method, Visiting book shop, Organizing exhibitions, Standing vendor and quotations. For acquiring information sources, the librarians who are working in semi urban institutions invite sellers to library followed by Standing vendor, Approval method, Quotations, Visiting book fairs, festivals and exhibitions, Visiting book shop and Organizing book exhibitions. Further, it reveals that Inviting sellers is also always preferred by the librarians who are working in Urban based institutions followed by standing vendor, approval method, visiting book shop, organizing exhibitions, visiting book fairs and quotations.

Chi-square test was used to test the significant difference in the modes of acquiring information source and location of the college libraries. The calculated value of 10.096 is less than the table value of 15.507 for degrees of freedom eight at .05 significance level. Therefore, it is inferred that there is significant difference in mode of acquiring information source and location of the college libraries. Hence, the hypothesis is not proved.

5.1.4.3 Acquiring Information Sources Vs Types of Institution

Acquiring information sources is further analysed based on the types of institution on five point scale. The mean and standard deviation are also calculated and the ranks are assigned. The same is shown in Table 5.11.

Table 5.11

Acquiring Information Sources Vs Types of Institution

S. No.	Description	Government n = 11								Government Aided n = 19								Self finance n = 47							
		A	**O**	**S**	**RA**	**N**	**M**	**SD**	**R**	**A**	**O**	**S**	**RA**	**N**	**M**	**SD**	**R**	**A**	**O**	**S**	**RA**	**N**	**M**	**SD**	**R**
1	Standing vendor	0 0%	3 27.3%	4 36.4%	1 9.1%	3 27.3%	3.36	1.21	7	7 36.8%	2 10.5%	5 26.3%	1 5.3%	4 21.1%	2.63	1.57	4	24 51.1%	10 21.3%	9 19.1%	2 4.3%	2 4.3%	1.89	1.13	2
2	Visiting Book shop	3 27.3%	2 18.2%	0 0 %	5 45.5%	1 9.1%	2.91	1.51	4	7 36.8%	3 15.8%	1 5.3%	5 26.3%	3 15.8%	2.68	1.60	5	16 34%	9 19.1%	5 10.6%	15 31.9%	2 4.3%	2.53	1.37	3
3	Inviting book sellers	3 27.3%	2 18.2%	4 36.4%	0 %	2 18.2%	2.64	1.43	1	9 47.4%	2 10.5%	5 26.3%	1 5.3%	2 10.5%	2.21	1.40	2	30 63.8%	11 23.4%	5 10.6%	1 2.1%	0 0%	1.51	0.78	1
4	Approval method	3 27.3%	4 36.4%	0 0%	2 18.2%	2 18.2%	2.64	1.57	2	9 47.4%	3 15.8%	2 10.5%	4 21.1%	1 5.3%	2.21	1.40	2	13 27.7%	12 25.5%	9 19.1%	8 17%	5 10.6%	2.57	1.35	4
5	Quotations	1 9.1%	2 18.2%	4 36.4%	1 9.1%	3 27.3%	3.27	1.35	5	10 52.6%	1 5.3%	5 26.3%	1 5.3%	2 10.5%	2.16	1.43	1	12 25.5%	10 21.3%	3 6.4%	10 21.3%	12 25.5%	3.00	1.59	7
6	Organizing book exhibitions	2 18.2%	3 27.3%	0 %	2 18.2%	4 36.4%	3.27	1.68	6	7 36.8%	4 21.1%	1 5.3%	5 26.3%	2 10.5%	2.53	1.50	3	17 36.2%	4 8.5%	10 21.3%	13 27.7%	3 6.4%	2.60	1.40	5
7	Visiting book fairs , festivals and exhibitions	2 18.2%	1 9.1%	6 54.5%	1 9.1%	1 9.1%	2.82	1.17	3	3 15.8%	1 5.3%	8 42.1%	2 10.5%	5 26.3%	3.26	1.37	6	14 29.8%	7 14.9%	3 6.4%	15 31.9%	8 17%	2.91	1.54	6

(A=Always; O= Often; S= Sometimes; RA = Rarely; N= Never; M = Mean; R= Rank)

The above table 5.11 indicates that Visiting Book shop (27.3%), Inviting sellers (27.3%) and Approval method (27.3%) are always preferred to acquire information sources by the Government college librarians followed by Organizing book exhibitions (18.2%), Visiting book fairs , festivals and exhibitions (18.2%) and rest (9.1%) of the librarians preferred Quotations but none of the government librarians preferred standing vendor method. It is observed that 52.6 percent of Government Aided college librarians always used Quotation method to acquire information sources, an equal percent (47.4%) of Government Aided college librarians invited book sellers and used Approval method and also an equal percent (36.8%) of the Government Aided College librarians used Standing vendor, Visiting bookshop, Organizing book exhibitions in Government Aided College libraries and a considerable proportion (15.8%) of Government Aided college librarians visited Book fairs, festivals and exhibitions. Further, it reveals that majority (63. 8 %) of Self finance college librarians always invite booksellers, more than half (51.1 %) of Self finance college librarians have always appointed standing vendor in their library and 25.5 percent of Self finance college librarians never used Quotation method for acquiring information sources.

It is clear from table that Government and Government Aided college librarians always invite the sellers and use Approval method to acquire information sources for library but Inviting book sellers and Standing vendor are the most preferred methods adopted by the Self finance college librarians. Both Government and Self finance college librarians are not interested to organize book exhibitions for the purpose of acquiring information sources whereas Government Aided college librarians are not interested to Visit book fairs, festivals and exhibitions for the purpose of acquiring information sources.

5. 1.5. MODE OF COMMUNICATION TO ACQUIRE INFORMATION SOURCES

The study analysed the mode of communication to acquire information sources by the librarians in the library. Five modes are identified and ascertained on three point scale such as "*Good*", "*Average*" and "*Poor*". The weightage is assigned from the least to the highest. The mean and standard deviation are calculated and ranks are also assigned. The same is shown in Table 5.12 and Figure 5.1.

Table 5.12

Mode of Communication

S. No.	Description	Always	Often	Rarely	Mean	SD	Rank
1	Face to face	39 50.6%	35 45.5%	3 3.9%	1.53	0.58	2
2	Postal/ Courier	39 50.6%	33 42.9%	5 6.5%	1.56	0.62	3
3	Telephone/ Cell phone	42 54.5%	31 40.3%	4 5.2%	1.51	0.60	1
4	Fax	3 3.9%	23 29.9%	51 66.2%	2.62	0.56	5
5	Email	17 22.1%	31 40.3%	29 37.7%	2.16	0.76	4

Table 5.12 and Figure 5.1shows that comparatively higher percent (54.5%) of librarians always preferred phone communication to acquire information sources. It is followed by Face to Face (50.6%), Postal (50.6%) and e- mail (22.1%) communication. Fax (66.2%) communication is a rarely preferred mode of communication by the librarians. The standard deviation ranges from 0.56 to 0.76.

Majority of the librarians preferred placing order for information sources through Phone (Land line and Mobile) communication. It is also observed that least number of librarians have ordered information sources through Fax.

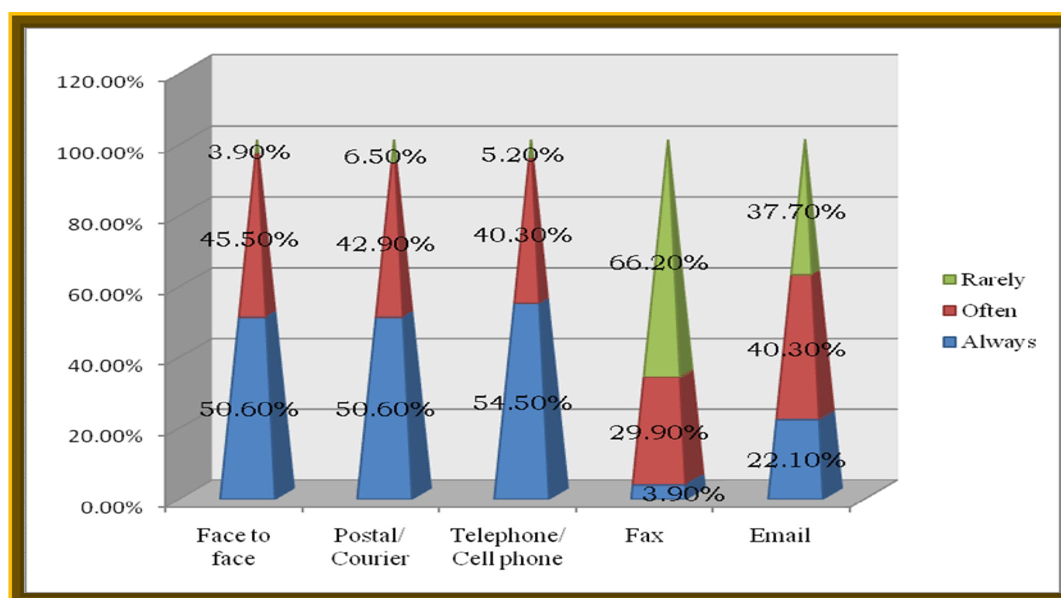


Figure 5.1 Mode of Communication

5.1.5.1 Mode of Communication Vs Gender

The mode of communication preferred by the librarians is analysed on the basis of gender. The mean and standard deviation are also calculated and ranks are assigned. The same is shown in Table 5.13.

Table 5.13

Mode of Communication Vs Gender

S. No.	Description	Male n = 41						Female n = 36					
		A	O	RA	M	SD	R	A	O	RA	M	SD	R
1	Face to face	24 58.5%	16 39%	1 2.4%	1.44	0.55	2	15 41.7%	19 52.8%	2 5.6%	1.64	0.59	3
2	Postal/ Courier	22 53.7%	16 39%	3 7.3%	1.54	0.64	3	17 47.2%	17 47.2%	2 5.6%	1.58	0.60	1
3	Telephone/ Cell phone	25 61%	15 36.6%	1 2.4%	1.41	0.55	1	17 47.2%	16 44.4%	3 8.3%	1.61	0.65	2
4	Fax	2 4.9%	12 29.3%	27 65.9%	2.61	0.59	5	1 2.8%	11 30.6%	24 66.7%	2.64	0.54	5
5	Email	11 26.8%	18 43.9%	12 29.3%	2.02	0.76	4	6 16.7%	13 36.1%	17 47.2%	2.31	0.75	4

(A = Always; O = Often; RA = Rarely; M = Mean; R = Rank)

Majority (61%) of male librarians have always preferred Phone communication. It is followed by Face to face communication (58.5%), Postal/ Courier (53.7%), E- mail (26.8%) but 65.9 percent rarely preferred to use fax communication. On the other hand, analysing the data given by the female librarians, it is clearly evident that almost an equal number of female respondents (47.2%) have always preferred Phone communication and Postal / Courier for acquiring information sources followed by Face to face communication (41.7%) but Fax (66.7%) and Email (47.2%) have been rarely preferred by female respondents. The standard deviation ranges from 0.54 to 2.61 in three point scale.

It is inferred that male librarians prefer to use Phone communication but female librarians preferred Postal communication. Fax communication is the least preferred mode of communication among the male and female librarians.

5.1.5.2 Mode of Communication Vs Experience

The mode of communication preferred by the librarians is analysed based on their experience. The mean and standard deviation are also calculated and ranks are assigned. The same is presented in Table 5.14.

Table 5.14

Mode of Communication Vs Experience

S. No.	Description	Below 5 years n = 29						5 – 10 years n = 24						Above 10 years n = 24						Chi square
		A	O	RA	M	SD	R	A	O	RA	M	SD	R	A	O	RA	M	SD	R	
1	Face to face	13 44.8%	16 55.2%	0 0%	1.55	0.51	2	12 50%	10 41.7%	2 8.3%	1.58	0.65	3	14 58.3%	9 37.5%	1 4.2%	1.46	0.59	1	3.835
2	Postal/ Courier	14 48.3%	13 44.8%	2 6.9%	1.59	0.63	3	16 66.7%	6 25%	2 8.3%	1.42	0.65	1	9 37.5%	14 58.3%	1 4.2%	1.67	0.56	3	5.553
3	Telephone/ Cell phone	17 58.6%	10 34.5%	2 6.9%	1.48	0.63	1	13 54.2%	9 37.5%	2 8.3%	1.54	0.66	2	12 50%	12 50%	0 0%	1.50	0.51	2	2.895
4	Fax	1 3.4%	9 31%	19 65.5%	2.62	0.56	5	0 0%	7 29.2%	17 70.8%	2.71	0.46	5	2 8.3%	7 29.2%	15 62.5%	2.54	0.66	5	2.313
5	Email	8 27.6%	9 31%	12 41.4%	2.14	0.83	4	5 20.8%	13 54.2%	6 25%	2.04	0.69	4	4 16.7%	9 37.5%	11 45.8%	2.29	0.75	4	4.099

(A = Always; O = Often; RA = Rarely; M = Mean; R = Rank)

It can be seen from the table 5.14 that 58.3 percent of the librarians with more than 10 years experience always use Face to face communication than the librarians with 5 – 10 years (50%) experience and librarian with less than 5 years (44.8%) experience. 66.7 percent of librarians with 5 - 10 years experience always used postal communication extensively to acquire communication when compared to librarians with less than 5 years of experience (48.3%) and librarians with more than 10 years (37.5%) experience. It reveals that 58.6 percent of librarians with less than 5 years experience always use Phone communication when compared to librarians with 6- 10 years (54.2%) experience and librarians with more than 10 years (50%) experience. 54.2 percent of librarians with 5 - 10 years experience often use e- mail communication compared to librarians with more than 10 years (37.5%) experience and librarians with less than 5 years experience (31%) experience. Fax communication is rarely used by all librarians.

Chi-Square test was administered to find out whether there is any significant relation between experience of librarians and mode of communication used by them in acquiring information source. The calculated value 5.553 is less than the table value 9.488 for degrees of freedom four at .05 significance level. It is inferred that there is a significant relation between the experience of librarians and mode of communication in acquiring information resource. Hence, the hypothesis is proved.

It is evident from the table 5.14 that Phone communication is preferred by librarians who have an experience below 5years whereas librarians with 5 to 10 years experience have preferred Postal communication and librarians with more than 10 years experience have preferred Face to face communication for acquiring information sources. Fax communication is not effectively used by librarians.

5.1.5.3 Mode of Communication Vs Types of institution

Table 5.15 furnishes the types of institution wise responses of respondents on mode of communication to acquire information sources for their library. The mean and standard deviation are also calculated, and ranks are assigned.

Table 5.15

Mode of Communication Vs Type of institution

S. No.	Description	Government n = 11						Government Aided n = 19						Self finance n = 47					
		A	O	RA	M	SD	R	A	O	RA	M	SD	R	A	O	RA	M	SD	R
1	Face to face	4 36.4%	7 63.6%	0 0%	1.64	0.51	1	10 52.6%	7 36.8%	2 10.5%	1.58	0.69	1	25 53.2%	21 44.7%	1 2.1%	1.49	0.55	2
2	Postal/ Courier	2 18.2%	9 81.8%	0 0%	1.82	0.41	3	5 26.3%	12 63.2%	2 10.5%	1.84	0.60	3	32 68.1%	12 25.5%	3 6.4%	1.38	0.61	1
3	Telephone/ Cell phone	3 27.3%	8 72.7%	0 0%	1.73	0.47	2	7 36.8%	11 57.9%	1 5.3%	1.73	0.47	2	32 68.1%	12 25.5%	3 6.4%	1.38	0.61	1
4	Fax	0 0%	1 9.1%	10 90.9%	2.91	0.30	5	1 5.3%	6 31.6%	12 63.2%	2.58	0.61	5	2 4.3%	16 34%	29 61.7%	2.57	0.58	4
5	Email	3 27.3%	4 36.4%	4 36.4%	2.09	0.83	4	3 15.8%	6 31.6%	10 52.6%	2.37	0.76	4	11 23.4%	21 44.7%	15 31.9%	2.09	0.75	3

(A = Always; O = Often; RA = Rarely; M = Mean; R = Rank)

It is pertinent to note here that in the description of Face to face communication responses from Government Aided college librarians (52.6%), Self financing college librarians (53.2%) have always preferred but 63.6 percent of Government college librarians have often preferred. In the description of Postal and Courier, 68.1 percent of Self finance college librarians have always communicated but Government (81.8%) and Government Aided (63.2%) college librarians have often used. Further it reveals that higher percent of Government (72.7%) and Government Aided (57.9%) college librarians have often used Phone communication but 68.1 percent Self financing college librarians always used. Government (90.9%), Government Aided (63.2%) and Self Finance (61.7%) college librarians have often communicated through Fax. E-mail has often been used by Government (36.4%) and Self Finance (44.7%) college librarians whereas it is rarely used by Government Aided (52.6%) college librarians.

It is inferred that Face to face communication is ranked first by Government and Government Aided college librarians but Postal and courier and Phone mode of communication is ranked first by Self finance college librarians. Fax is the least mode of communication of Government, Government Aided and Self Finance college librarians.

5.1.6 BARRIERS TO ACQUIRE INFORMATION SOURCES

Struggles are always there in all processes. This study has analysed various barriers faced by the librarians in acquiring information sources for libraries. Six barriers are identified and ascertained on five point scale such as "*Always*", "*Often*", "*Sometimes*", "*Rarely*" and "*Never*". The weightage is assigned from the least to the highest. The mean and Standard deviation is calculated, and ranks are assigned and shown in Table 5.16 and Figure 5.2.

Table 5.16

Barriers to Acquire Information Sources

S. No.	Description	Always	Often	Some times	Rarely	Never	Mean	SD	Ra nk
1	Policy of the Institution	8 10.4%	12 15.6%	10 13%	17 22.1%	30 39%	3.64	1.40	5
2	Inadequate funds	38 49.4%	17 22.1%	14 18.2%	4 5.2%	4 5.2%	1.95	1.17	2
3	Lack of co-operation	7 9.1%	11 14.3%	7 9.1%	13 16.9%	39 50.6%	3.86	1.41	6
4	Lack of Books Selection Sources	34 44.2%	15 19.5%	17 22.1%	3 3.9%	8 10.4%	2.17	1.32	3
5	Lack of equipments	27 35.1%	15 19.5%	6 7.8%	23 29.9%	6 7.8%	2.56	1.43	4
6	Language barriers	40 51.9%	20 26.0%	11 14.3%	2 2.6%	4 5.2%	1.83	1.11	1

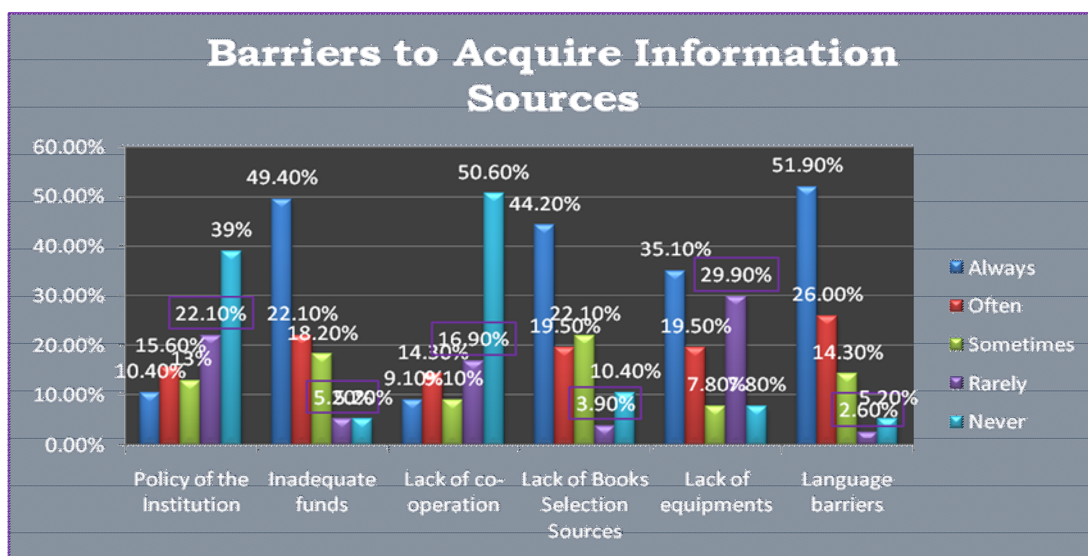


Figure 5.2 Barriers to Acquire Information Sources

Table 5.16 and Figure 5.2 depicted that 51.9 percent of the librarians always encountered Language barrier in acquiring information sources which is followed by inadequate funds (49.4%), Lack of book selection sources (44.2%), and Lack of equipments (35.1%). After analysis, it has been found that Lack of co-operation (9.1%) is not a major barrier to acquire information sources.

It is inferred that Language barrier is the major barrier encountered by the librarians in acquiring information sources because majority of the book sellers and publishers are located in places like New Delhi, Hyderabad, Bangalore, etc.

5.1.6.1 Barriers to Acquire Information Sources Vs Gender

The study analyses the barriers confronted by male and female librarians in acquiring information sources. The mean and Standard deviation are calculated and ranks are also assigned and shown in Table 5.17.

Table 5.17

Barriers to Acquire Information Sources Vs Gender

S. No.	Description	Male n = 41								Female n = 36							
		A	O	S	RA	N	M	SD	R	A	O	S	RA	N	M	SD	R
1	Policy of the Institution	5 12.2%	3 7.3%	7 17.1%	12 29.3%	14 34.1%	3.66	1.35	5	3 8.3%	9 25%	3 8.3%	5 13.9%	16 44.4%	3.61	1.48	5
2	Inadequate funds	14 34.1%	12 29.3%	10 24.4%	2 4.9%	3 7.3%	2.22	1.19	2	24 66.7%	5 13.9%	4 11.1%	2 5.6%	1 2.8%	1.64	1.07	1
3	Lack of co-operation	5 12.2%	5 12.2%	4 9.8%	8 19.5%	19 46.3%	3.76	1.46	6	2 5.6%	6 16.7%	3 8.3%	5 13.9%	20 55.6%	3.97	1.36	6
4	Lack of book selection sources	17 41.5%	6 14.6%	11 26.8%	2 4.9%	5 12.2%	2.32	1.39	3	17 47.2%	9 25%	6 16.7%	1 2.8%	3 8.3%	2.00	1.24	3
5	Lack of equipments	13 31.7%	9 22%	3 7.3%	11 26.8%	5 12.2%	2.66	1.478	4	14 38.9%	6 16.7%	3 8.3%	12 33.3%	1 2.8%	2.44	1.38	4
6	Language barriers	21 51.2%	10 24.4%	8 19.5%	1 2.4%	1 2.4%	1.80	1.01	1	19 52.8%	10 27.8%	3 8.3%	1 2.8%	3 8.3%	1.86	1.22	2

(A = Always; O = Often; S = Sometimes; RA= Rarely; M = Mean; R = Rank)

It can be seen from the table 5.17 that higher percent of male (34.1%) and female (44.4%) librarians never faced any problem associated with Policy of the institution in acquiring information sources. With respect to Inadequate funds, comparatively higher number of female librarians (66.7 %) has been always affected than male librarians (34.1%). It is further found that nearly equal percent of male (41.5%) and female (47.2%) librarians have always faced the problem of Lack of book selection sources. Female librarians (38.9%) have always faced problem in using equipments than the male librarians (31.7%). It is noted that more than 50 percent of male (51.2%) and female (52.8%) librarians have always encountered the problem through language barrier.

It is inferred that language is the major barrier encountered by male librarians whereas female librarians encountered inadequate funds. Lack of co-operation offers fewer barriers among male and female librarians.

5.1.6.2 Barriers to Acquire Information Sources Vs Types of Institution

The barriers encountered during the acquiring of information sources is also analysed by types of institution.

Table 5.18

Barriers to Acquire Information Sources Vs Types of Institution

S. No.	Description	Government n = 11								Government Aided n = 19								Self finance n = 47							
		A	O	S	R	N	M	SD	R	A	O	S	R	N	M	S	R	A	O	S	R	N	M	SD	R
1	Policy of the Institution	1 9.1%	1 9.1%	1 9.1%	6 54.5%	2 18.2%	3.64	1.21	**5**	3 15.8%	1 5.3%	2 10.5%	3 15.8%	10 52.6%	3.84	1.54	**5**	4 8.5%	10 21.3%	7 14.9%	8 17%	18 38.3%	3.55	1.41	**5**
2	Inadequate funds	5 45.5%	1 9.1%	4 36.4%	1 9.1%	0 0%	2.09	1.14	**1**	5 26.3%	7 36.8%	4 21.1%	1 5.3%	2 10.5%	2.37	1.26	**2**	28 59.6%	9 19.1%	6 12.8%	2 4.3%	2 4.3%	1.74	1.11	**3**
3	Lack of co-operation	2 18.2%	0 0%	0 0%	2 18.2%	7 63.6%	4.09	1.58	**6**	1 5.3%	2 10.5%	2 10.5%	2 10.5%	12 63.2%	4.16	1.30	**6**	4 8.5%	9 19.1%	5 10.6%	9 19.1%	20 42.6%	3.68	1.42	**6**
4	Lack of book selection sources	3 27.3%	2 18.2%	4 36.4%	1 9.1%	1 9.1%	2.55	1.29	**3**	4 21.1%	3 15.8%	6 31.6%	1 5.3%	5 26.3%	3.00	1.49	**4**	27 57.4%	10 21.3%	7 14.9%	1 2.1%	2 4.3%	1.74	1.07	**2**
5	Lack of equipments	4 36.4%	1 9.1%	0 0%	3 27.3%	3 27.3%	3.00	1.79	**4**	7 36.8%	3 15.8%	2 10.5%	6 31.6%	1 5.3%	2.53	1.43	**3**	16 34%	11 23.4%	4 8.5%	14 29.8%	2 4.3%	2.47	1.35	**4**
6	Language barriers	5 45.5%	2 18.2%	1 9.1%	1 9.1%	2 18.2%	2.36	1.63	**2**	7 36.8%	4 21.1%	6 31.6%	0 .0%	2 10.5%	2.26	1.28	**1**	28 59.6%	14 29.8%	4 8.5%	1 2.1%	0 0%	1.53	0.75	**1**

(A = Always; O = Often; S = Sometimes R A= Rarely; M = Mean; R = Rank)

Table 5.18 indicates that Policy of the institution related to acquire information sources has not encountered problems among Government Aided college librarians (52.6%) and Self finance college librarians (38.3%) whereas rarely encountered among Government librarians (54.5%). Inadequate funds have always encountered problems in Government college libraries (45.5%) and Self Finance College libraries (59.6%) whereas Government Aided libraries (36.8%) have encountered problems often. Table 5.18 reveals that above 60 percent of Government (63.6%) and Government Aided (63.2%) college librarians have rarely faced problem in Co- operation to acquire information sources for their libraries whereas 42.6 percent of Self finance college librarians have rarely encountered problems to acquire information sources. To find and use of books selection sources among Government (36.4%) and Government Aided (31.6%) college librarians have sometimes faced problems in acquiring information sources but Self finance college librarians (57.4%) always encountered problems. The use of equipments for acquiring information sources has always encountered problems among Government (36.4%), Government Aided (36.8%) and Self finance (34%) college librarians59.6 percent of Self finance college librarians have always faced language problem more than the Government (45.5%) and Government Aided (36.8%) college librarians.

It is inferred that Lack of equipments and Language barriers are the main problems among Government, Government Aided and Self finance college librarians. Co-operation among librarians and users (Management, faculties, students and book Publishers and sellers) is in good level to acquire information sources. Government Aided college librarians have less problems related to funds because they utilize funds from Government and Management.

5.1.7 MANAGEMENT OF INFORMATION SOURCE COLLECTION

Management of information source collection is an essential process in all types of libraries then only library professionals have to fulfil the users need and visions of institutions. Six major categories are identified and ascertained on five point scale such as "*More effective*", "*Effective*", "*Neutral*", "*Less effective*" and "*More Less effective*". The mean and standard deviation are calculated and ranks are assigned. The weightage is assigned from the least to the highest. The same is shown in Table 5.19 and Figure 5.3.

Table 5.19

Management of information source collection

S. No.	Description	More effective	Effective	Neutral	Less effective	More Less effective	Mean	SD	R
1	Planning and Policy Making	19 24.7%	53 68.8%	5 6.5%	0 0%	0 0%	1.82	0.53	2
2	Collection analysis	13 16.9%	58 75.3%	6 7.8%	0 0%	0 0%	1.91	0.49	3
3	Collection Maintenance	43 55.8%	29 37.7%	5 6.5%	0 0%	0 0%	1.51	0.62	1
4	Budgetary Control	7 9.1%	50 64.9%	20 26%	0 0%	0 0%	2.17	0.57	5
5	Liaison (User, Publisher, Management Librarians)	15 19.5%	52 67.5%	10 13%	0 0%	0 0%	1.94	0.57	4
6	Resource Sharing policy & method	3 3.9%	25 32.5%	41 53.2%	7 9.1%	1 1.3%	2.71	0.74	6

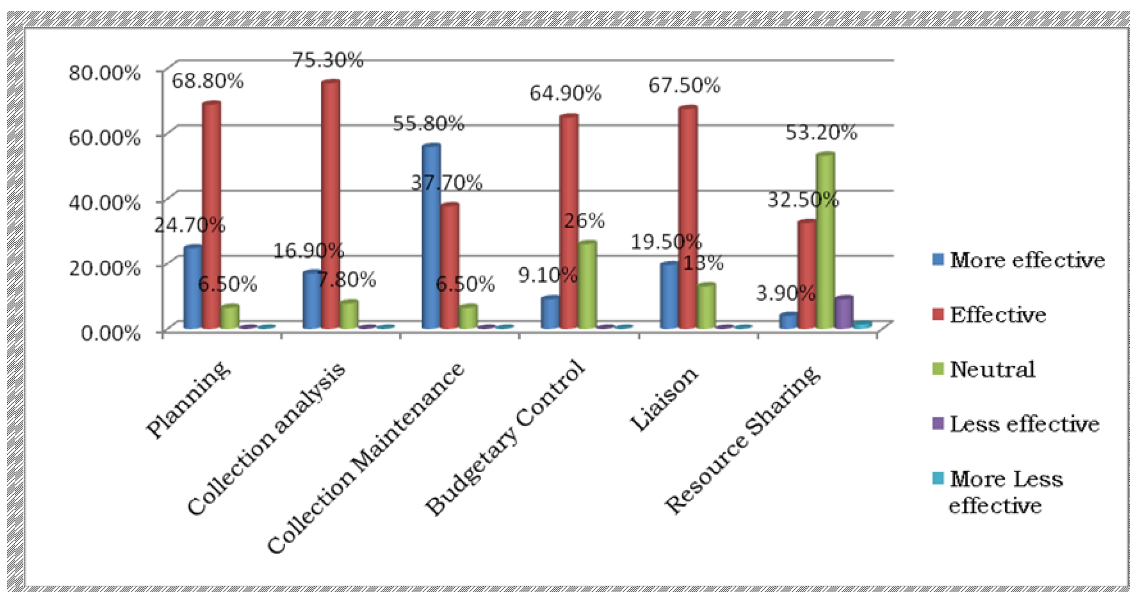


Figure 5.3 Management of Information Source Collection

Table 5.19 and Figure 5.3 depicts that 68.8 percent of librarians have effectively planned and maintained the collection. It further reveals that Collection analysis (75.3%), Budgetary Control (64.9%) and Liaison with User, Publisher, Management, and other Librarians (67.5%) are effectively done by the librarians but 53.2 percent of librarians shared the collection (Resources) in a neutral way and 55.8 percent of librarians have maintained collection in more effective.

Majority of the librarians have given importance (first rank) for proper maintenance of collection in libraries. It is followed by Planning and policy making related to development of library activities, Collection Analysis and Liaison. It further stated that Budgetary Control and Resource Sharing are the least preferences given by librarians because most of the library budget is maintained by authorities of the college.

5.1.7.1 Management of information source collection Vs Gender

Management of information source collection is analysed between male and female librarians and the same is shown in Table 5.20. Mean and standard deviation are also calculated and it is ranked based on mean.

Table 5.20

Management of information source collection Vs Gender

S. No.	Description	Male n = 41								Female n = 36							
		ME	E	N	LE	MLE	M	SD	R	ME	E	N	LE	MLE	M	SD	R
1	Planning and Policy Making	14 34.1%	25 61%	2 4.9%	0 0%	0 0%	1.71	0.56	2	5 13.9%	28 77.8%	3 8.3%	0 0%	0 0%	1.94	0.48	3
2	Collection analysis	8 19.5%	31 75.6%	2 4.9%	0 0%	0 0%	1.85	0.48	3	5 13.9%	27 75%	4 11.1%	0 0%	0 0%	1.97	0.51	4
3	Collection Maintenance	25 61%	15 36.6%	1 2.4%	0 0%	0 0%	1.41	0.55	1	18 50%	14 38.9%	4 11.1%	0 0%	0 0%	1.61	0.69	1
4	Budgetary Control	4 9.8%	25 61%	12 29.3%	0 0%	0 0%	2.20	0.60	5	3 8.3%	25 69.4%	8 22.2%	0 0%	0 0%	2.14	0.54	5
5	Liaison	6 14.6%	31 75.6%	4 9.8%	0 0%	0 0%	1.95	0.50	4	9 25%	21 58.3%	6 16.7%	0 0%	0 0%	1.92	0.65	2
6	Resource Sharing Policy & method	3 7.3%	12 29.3%	22 53.7%	3 7.3%	1 2.4%	2.68	0.82	6	0 0%	13 36.1%	19 52.8%	4 11.1%	0 0%	2.75	0.65	6

(ME = More effective; E = Effective; N = Neutral; LE = Less effective; MLE = More Less effective; M = Mean; R = Rank)

It is witnessed from table 5.20 that Collection Maintenance is maintained by both male (61%) and female (50%) librarians more effectively. Planning and policy making, Collection analysis, Budgetary Control and Liaison have been done by male (61%, 75.6%, 61% and 75.6% respectively) and female (77.8%, 75%, 69.4% and 58.3% respectively) librarians effectively. Nearly an equal percent of male (53.7%) and female librarians (52.8%) have maintained resource sharing as neutral.

Proper maintenance of library collection has been ranked as first by both male and female librarians. Secondly, Planning and Policy making have been done effectively by male librarians but Liaison have been done effectively by female librarians. Least importance has been given to Resource sharing by male and female librarians.

5.1.7.2 Management of information source collection Vs Types of institution

Management of collection is further analysed between Government, Government Aided and Self Financing College librarians and the same is shown in Table 5.21. Mean and standard deviation are also calculated and it is ranked based on mean.

Table 5.21

Management of information source collection Vs Types of institution

S. No.	Description	Government n = 11								Government Aided n = 19								Self finance n = 47							
		ME	E	N	LE	MLE	M	SD	R	ME	E	N	LE	MLE	M	SD	R	ME	E	N	LE	MLE	M	SD	R
1	Planning and Policy Making	1 9.1%	10 90.9%	0 0%	0 0%	0 0%	1.91	0.30	3	7 36.8%	11 57.9%	1 5.3%	0 0%	0 0%	1.68	0.58	2	11 23.4%	32 68.1%	4 8.5%	0 0%	0 0%	1.85	0.55	2
2	Collection analysis	2 18.2%	9 81.8%	0 0%	0 0%	0 0%	1.82	0.40	2	3 15.8%	14 73.7%	2 10.5%	0 0%	0 0%	1.95	0.52	4	8 17%	35 74.5%	4 8.5%	0 0%	0 0%	1.91	0.50	3
3	Collection Maintenance	4 36.4%	7 63.6%	0 0%	0 0%	0 0%	1.64	0.50	1	11 57.9%	8 42.1%	0 .0%	0 0%	0 0%	1.42	0.51	1	28 59.6%	14 29.8%	5 10.6%	0 0%	0 0%	1.51	0.69	1
4	Budgetary Control	1 9.1%	8 72.7%	2 18.2%	0 0%	0 0%	2.09	0.54	4	4 21.1%	13 68.4%	2 10.5%	0 0%	0 0%	1.89	0.57	3	2 4.3%	29 61.7%	16 34%	0 0%	0 0%	2.30	0.55	5
5	Liaison	1 9.1%	8 72.7%	2 18.2%	0 0%	0 0%	2.09	0.54	4	7 36.8%	11 57.9%	1 5.3%	0 0%	0 0%	1.68	0.58	2	7 14.9%	33 70.2%	7 14.9%	0 0%	0 0%	2.00	0.55	4
6	Resource Sharing Policy & method	0 0%	4 36.4%	5 45.5%	2 18.2%	0 0%	2.82	0.75	5	3 15.8%	7 36.8%	8 42.1%	1 5.3%	0 .0%	2.37	0.83	5	0 0%	14 29.8%	28 59.6%	4 8.5%	1 2.1%	2.83	0.67	6

(ME=More effective; E=Effective; N=Neutral; LE = Less effective; MLE = More Less effective; M = Mean; SD = Standard deviation; R=Rank)

It can be seen from the table 5.21 that majority of Government college librarians (90.9%) have planning and policy making skills for managing collection in more effective manner than Self financing (68.1%) and Government Aided (57.9%) college librarians. Collection analysis has been done by Government (81.8%), Government Aided (73.7%) and Self financing (74.5%) college librarians in an effective way. It is further observed that Self Financing (59.6%) and Government Aided (57.9%) college librarians have maintained collection in a more effective way whereas Government (63.6%) college librarians at an effective level. Government (72.7%), Self Financing (70.2%) and Government Aided (57.9%) college librarians have effectively maintained Liaison among Users, Publishers, Management, Librarian related to collection. Resource sharing between libraries has been done neutrally by Government (45.5%), Government Aided (36.8%) and Self Financing (59.6%) college librarians.

It is observed that Collection maintenance is the prime management activity among Government, Government Aided and Self Financing college librarians. Planning and Policy Making is the second important management activity related to Government Aided and Self Financing College librarians whereas Government College librarians have given importance to Collection analysis. Least importance has been given by Government, Government Aided and Self Financing College librarians to resource sharing.

5.1.8 LIBRARY SERVICES

The study ascertained services provided by the librarians on five point scale such as *"More effective", "Effective", "Neutral", "Less effective"* and *"More less effective"*. The services are grouped into eight major categories. The mean and standard deviation are calculated and based on that the ranks are given. The weightage is assigned from the least to the highest and the same is shown in Table 5.22 and Figure 5.4.

Table 5.22

Library Services

S. No.	Description	More effective	Effective	Neutral	Less effective	More less effective	Mean	SD	Rank
1	Lending service	49 63.6%	26 33.8%	1 1.3%	1 1.3%	0 0%	1.40	0.59	1
2	Reference service	5 6.5%	72 93.5%	0 0%	0 0%	0 0%	1.94	0.25	2
3	Referral service	0 0%	59 76.6%	14 18.2%	4 5.2%	0 0%	2.29	0.56	4
4	Inter Library Loan service	5 6.5%	18 23.4%	41 53.2%	13 16.9%	0 0%	2.81	0.80	7
5	Consortium (UGC Info net / N-List)	7 9.1%	19 24.7%	36 46.8%	15 19.5%	0 0%	2.77	0.87	6
6	Online service	7 9.1%	22 28.6%	10 13.0%	38 49.4%	0 0%	3.03	1.08	8
7	CAS	7 9.1%	59 76.6%	8 10.4%	3 3.9%	0 0%	2.09	0.59	3
8	Reprography service	8 10.4%	43 55.8%	19 24.7%	7 9.1%	0 0%	2.32	0.79	5

(CAS = Current Awareness Service)

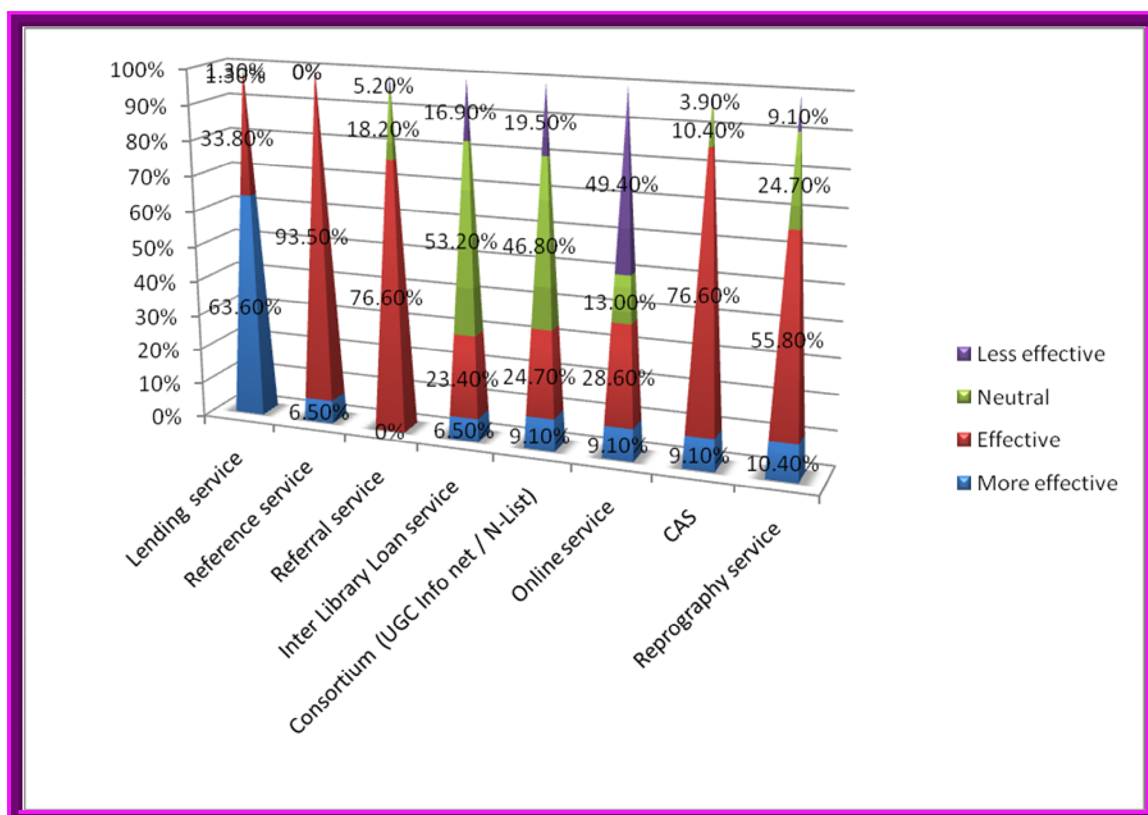


Figure 5.4 Library Services

It can be seen from the table 5.22 and figure 5.4 that 63.6 percent of librarians are more effective in providing lending services to the users. 93.5 percent of librarians are effective in providing reference services to the users. It is followed by Referral (76.6%), Current Awareness Service (76.6%) and Reprography (55.8%). Only few librarians pointed that they are providing Inter Library Loan (23.4%), Consortium (UGC Info net / N-List) (24.7%) and Online service (28.6%) effectively.

It is found from table 5.22 that Lending service is primly provided by the librarians in more a effective way. Reference, Referral, Reprography and Current Awareness service are provided effectively by the librarians. Inter Library Loan and Consortium (UGC Info net / N-List) services are provided by the library in neutral level and Online service is less effective.

5.1.8.1 Library Services Vs Location

The study is further extended to identify the level of services provided by the library on the basis of location. The mean and standard deviation are calculated and based on that the ranks are provided and the same is shown in Table 5.23.

Table 5.23

Library Services Vs Location

S. No.	Description	Rural n = 39							Semi urban n = 16							Urban n = 22						
		ME	E	N	LE	M	S	R	ME	E	N	LE	M	S	R	ME	E	N	LE	M	S	R
1	Lending service	27 69.2%	12 30.8%	0 0%	0 0%	1.31	0.47	1	9 56.3%	6 37.5%	1 6.3%	0 0%	1.50	0.63	1	13 59.1%	8 36.4%	0 0%	1 4.5%	1.50	0.74	1
2	Reference service	3 7.7%	36 92.3%	0 0%	0 0%	1.92	0.27	2	1 6.3%	15 93.8%	0 0%	0 0%	1.94	0.25	2	1 4.5%	21 95.5%	0 0%	0 0%	1.95	0.21	3
3	Referral service	0 0%	31 79.5%	5 12.8%	3 7.7%	2.28	0.61	5	0 0%	13 81.3%	2 12.5%	1 6.3%	2.25	0.58	4	0 0%	15 68.2%	7 31.8%	0 0%	2.32	0.48	4
4	Inter Library Loan service	4 10.3%	7 17.9%	22 56.4%	6 15.4%	2.77	0.84	7	0 0%	3 18.8%	10 62.5%	3 18.8%	3	0.63	6	1 4.5%	8 36.4%	9 40.9%	4 18.2%	2.73	0.83	7
5	Consortium (UGC Info net / N-List)	4 10.3%	12 30.8%	16 41%	7 17.9%	2.67	0.90	6	0 0%	0 0%	10 62.5%	3 18.8%	3	0.63	6	3 13.6%	4 18.2%	10 45.5%	5 22.7%	2.77	0.97	8
6	Online service	1 2.6%	11 28.2%	5 12.8%	22 56.4%	3.23	0.96	8	0 0%	6 37.5%	4 25%	6 37.5%	3.00	0.89	8	6 27.3%	5 22.7%	1 4.5%	10 45.5%	2.68	1.32	6
7	CAS	1 2.6%	33 84.6%	2 5.1%	3 7.7%	2.18	0.60	3	0 0%	12 75%	4 25%	0 0%	2.25	0.45	3	6 27.3%	14 63.6%	2 9.1%	0 0%	1.82	0.59	2
8	Reprography service	5 12.8%	23 59.0%	9 23.1%	2 5.1%	2.21	0.73	4	0 0%	10 62.5%	4 25%	2 12.5%	2.50	0.73	5	3 13.6%	10 45.5%	6 27.3%	3 13.6%	2.41	0.91	5

(ME = More effective; E = Effective; N = Neutral; LE = Less effective; M = Mean; R = Rank; CAS = Current Awareness Service)

Table 5.23 depicts that 69.2 percent college libraries located in rural are felt, Lending services is a more effective service than Urban (59.1%) and Semi urban (56.3%) located college libraries. Rural (92.3%), Semi urban (93.8%), Urban (95.5%) located college librarians are provided with Reference service which is effective. It further reveals that 81.3 percent of Semi urban college libraries are effectively provided Referral service to the users when compared to Rural (79.5%) and Urban (68.2 %) college libraries.

Majority of the Rural (56.4%), Semi urban (62.5%) and Urban (40.9%) libraries are provided with Inter library loan service in neutral. Majority of the Rural (41%), Semi urban (62.5%) and Urban (45.5%) libraries are provided with Consortium services in a neutral way. Online service provided by the rural (56.4%), semi urban (37.5%) and urban (45.5%) college libraries in less effective. Rural (84.6%), semi urban (75%) and urban (45.5%) college libraries provided with CAS by effective.

It is clearly evident from the table 5.23 that Rural college libraries are provided with Lending and Reference services in an effective whereas Inter library loan and Online services are the least. The Lending and Reference services in semi urban college libraries are given more importance whereas Inter library loan, Consortium service and Online services are considered the least. In urban colleges Lending service and Current Awareness Service are given more importance whereas Inter library loan, Reprography service and Consortium service are treated as the least service in libraries.

5.1.8.2 Library Services Vs Types of institution

Library Services are analysed as Government, Government Aided and Self Finance College Libraries on five point scale. The mean and standard deviation are calculated and ranks are allotted basis of the mean. The same is presented in Table 5.24.

Table 5.24

Library Services Vs Types of institution

S. No.	Description	Government n = 11							Government Aided n = 19							Self finance n = 47							Chi-square
		ME	E	N	LE	M	S	R	ME	E	N	LE	M	S	R	ME	E	N	LE	M	S	R	
1	Lending service	5 45.5%	6 54.5%	0 0%	0 0%	1.55	0.52	1	13 68.4%	6 31.6%	0 0%	0 0%	1.32	0.48	1	31 66.0%	14 29.8%	1 2.1%	1 2.1%	1.4	0.65	1	3.610
2	Reference service	0 0%	11 100%	0 0%	0 0%	2	0.	2	2 10.5%	17 89.5%	0 0%	0 0%	1.89	0.32	4	3 6.4%	44 93.6%	0 0%	0 0%	1.94	0.25	2	1.274
3	Referral service	0 0%	6 54.5%	5 45.5%	0 0%	2.45	0.52	4	0 0%	17 89.5%	2 10.5%	0 0%	2.11	0.32	5	0 0%	36 76.6%	7 14.9%	4 8.5%	2.32	0.63	5	9.054
4	Inter Library Loan service	1 9.1%	1 9.1%	2 18.2%	7 63.6 %	3.36	1.03	7	1 5.3%	8 42.1%	8 42.1%	2 10.5%	2.58	0.77	7	3 6.4%	9 19.1%	31 66%	4 8.5%	2.77	0.70	7	25.387
5	Consortium	0 0%	3 27.3%	3 27.3%	5 45.5%	3.18	0.87	5	4 21.1%	5 26.3%	5 26.3%	5 26.3%	2.58	1.12	8	3 6.4%	11 23.4%	28 59.6%	5 10.6%	2.74	0.74	6	14.845
6	Online service	0 0%	0 0%	0 0%	11 100%	4	0	8	7 36.8%	5 26.3%	2 10.5%	5 26.3%	2.26	1.24	6	0 0%	17 36.2%	8 17.0%	22 46.8%	3.11	0.91	8	35.420
7	CAS	0 0%	10 90.9%	0 %	1 9.1%	2.18	0.60	3	7 36.8%	11 57.9%	1 5.3%	0 0%	1.68	0.58	2	0 0%	38 80.9%	7 14.9%	2 4.3%	2.23	0.52	3	26.700
8	Reprography service	0 0%	1 9.1%	5 45.5%	5 45.5%	3.36	0.67	6	5 26.3%	13 68.4%	1 5.3%	0 0%	1.79	0.54	3	3 6.4%	29 61.7%	13 27.7%	2 4.3%	2.30	0.66	4	35.572

(ME = More effective; E = Effective; N = Neutral; LE = Less effective; M = Mean; R = Rank; CAS = Current Awareness Service)

It is inferred from the table 5.24 that Lending services are provided by the Government and Government aided colleges with 100% effectiveness and they are ranked first whereas Self Financing Colleges is ranked first with 95.8% effective. Reference services are 100 percent effective in Government, Government aided and Self Financing College Libraries and ranked as second by Government and Self Financing College Libraries whereas in Government Aided colleges it is ranked fourth. It observed from the table 5.24 that Government College libraries (54.5%) felt Referral services as rank fourth whereas Government Aided (89.5%) and Self finance (76.6%) college librarians are ranked fifth. It can be seen from the table that providing of Inter Library Loan service is felt to be less effective by Government (63.6 %) whereas Government Aided (42.1%) and Self finance (66%) College libraries are neutral. Services provided through Consortium are felt to be less effective by Government librarians (45.5%), Government Aided (26.3%) College are less effective and Self finance colleges (59.6%) are neutral. It further reveals that Online services are provided in less effective by Government colleges (100%) and Self finance (36.2%) colleges whereas less number of Government aided (36.8%) provided more effective. CAS is the major services among the various services provided by the libraries and it is ranked in second by Government Aided colleges (94.7% including of more effective and effective) and third by Government (90.9% including of more effective and effective) and Self finance (80.9% including of more effective and effective) colleges. In various services, Reprography services are provided by Government Aided colleges (68.4%) and Self finance (61.7%) in effective way whereas Government (45.5%) colleges are given in neutral.

The Chi-Square test was administered to test the significant association among Government, Government Aided, Self financing college libraries in providing various library services. The calculated value 35.572 is greater than table value 15.5073 for the degree of freedom eighth at .05 significance level. Therefore, the hypothesis is not statistically significant and the hypothesis is not proved.

It is inferred from the table 5.24 that providing of Lending services are positively felt by Government, Government Aided and Self Finance College librarians. Reference, Referral and CAS services are provided by the Government, Government Aided and Self Finance College libraries effectively. Inter Library Loan and Consortium service are provided less effectively by Government libraries, effectively by Government Aided College libraries and neutrally by Self Finance Colleges. Online services are given by Government and Self Finance college libraries less effectively.

5.1.9 PROBLEMS IN INFORMATION SOURCE COLLECTION

The study has ascertained the Problems in library collection faced by the librarians. Ten issues have been identified and analysed on a nominal scale. The mean and standard deviation are calculated and ranks are given based on the mean. The weightage is assigned from the least to the highest and the same is shown in Table 5.25.

Table 5.25
Problems in Information Source Collection

S. No.	Description	Responses	Mean	SD	Rank
1	Theft of book	40 51.9%	1.48	0.50	5
2	Non return of Library materials	30 39%	1.61	0.49	7
3	Tearing pages	58 75.3%	1.25	0.43	2
4	Mutilation of resources	33 42.9%	1.57	0.50	6
5	Torn book spine	48 62.3%	1.38	0.49	4
6	Misplacement and displacement	60 77.9%	1.22	0.42	1
7	Using someone's identity to borrow	26 33.8%	1.66	0.48	9
8	Borrowing books for friends and family members	29 37.7%	1.62	0.49	8
9	Environmental control (Temperature and Climate)	22 28.6%	1.71	0.46	10
10	Biological pests (Insects or worms)	53 68.8%	1.31	0.47	3

Among the several problems in collection maintenance, Misplacement and displacement (77.9%) is the major problem encountered by the librarians followed by the Tearing pages (75.3%). 68.8 percent of the librarians have faced the problem of Biological pests (like Insects, worms). Life of the document has decreased due to improper handling, 62.3 percent of the librarians said that torn book spine was another problem, followed by Theft of book (51.9 %) and resource mutilation (42.9 %). It is further analysed that 39 percent of librarians are facing Non return of Library materials by users. Using someone's identity to borrow (33.8%) and Borrowing books for friends and family members (37.7%) by users are also affecting the library activities. Environmental control (Temperature and Climate) (28.6%) is the least problem encountered by the librarians.

It is clearly evident that the most common problems related to information source collection in libraries are misplacement and displacement of the documents followed by tearing pages whereas environmental control problem like temperature, humidity and lighting is the least problem encountered among the librarians.

5.1.9.1 Problems in Information Source Collection Vs Location

Problems in information source collection have further analysed on the location of colleges. The mean and standard deviation are calculated and ranks are given based on the above and the same is shown in Table 5.26.

Table 5.26
Problems in Information Source Collection Vs Location

S. No.	Description	Rural n = 39				Semi urban n = 16				Urban n = 22			
		Responses	M	SD	R	Responses	M	SD	R	Responses	M	SD	R
1	Theft of book	22 56.4%	1.44	0.50	5	9 56.3%	1.44	0.5	4	9 40.9%	1.59	0.50	7
2	Non return of Library materials	17 43.6%	1.56	0.50	7	6 37.5%	1.63	0.5	8	7 31.8%	1.68	0.48	9
3	Tearing pages	29 74.4%	1.26	0.44	2	12 75%	1.25	0.45	1	17 77.3%	1.23	0.43	2
4	Mutilation of resources	18 46.2%	1.54	0.51	6	8 50%	1.50	0.52	7	7 31.8%	1.68	0.48	9
5	Torn book spine	26 66.7%	1.33	0.48	3	9 56.3%	1.44	0.51	4	13 59.1%	1.41	0.50	4
6	Misplacement and displacement	31 79.5%	1.21	0.41	1	11 68.8%	1.31	0.48	3	18 81.8%	1.18	0.4	1
7	Using someone's identity to borrow	14 35.9%	1.64	0.49	8	1 6.3%	1.94	0.25	10	11 50%	1.5	0.51	5
8	Borrowing books for friends and family members	10 25.6%	1.74	0.44	9	9 56.3%	1.44	0.51	4	10 45.5%	1.55	0.51	6
9	Environmental control (Temperature and Climate)	9 23.1%	1.77	0.43	10	5 31.3%	1.69	0.48	9	8 36.4%	1.64	0.49	8
10	Biological pests (Insects or worms)	26 66.7%	1.33	0.48	3	12 75%	1.25	0.445	1	15 68.2%	1.32	0.48	3

(M = Mean; R = Rank)

In rural college libraries, 79.5 percent of librarians have faced problems in misplacement of library documents by the users, followed by Tearing pages (74.4%) and Environmental problem (23.1%) is the least problem in library collection. Tearing of pages (75%) and Biological pests (75%) are the major problems faced among Semi urban college librarians followed by Misplacement and displacement (68.8%) and Using someone identity to borrow documents (6.3%) is the least problem encountered by Semi Urban college librarians. 81.8 percent of Urban college librarians are facing Misplacement and displacement as the main problem of information source collection followed by Tearing pages (77.3%) whereas only 31.8 percent of Urban college librarians said that Resource mutilation (31.8%) and Non return of library material (31.8%) were the least encountered problems.

It is inferred that Misplacement of library documents by the users is the main problem encountered by Rural and Urban college librarians whereas Biological pests is the major problem among Semi Urban college librarians.

5.1.9.2 Problems in Information Source Collection Vs Types of institution

Problems in library collection have been analysed on types of institution. The mean and standard deviation are calculated. Ranks are given on the basis of mean and the same is presented in Table 5.27.

Table 5.27

Problems in Information Source Collection Vs Types of institution

S. No.	Description	Government n = 11				Government Aided n = 19				Self finance n = 47			
		Responses	M	SD	R	Responses	M	SD	R	Responses	M	SD	R
1	Theft of book	5 45.5%	1.55	0.52	5	9 47.4%	1.53	0.51	5	26 55.3%	1.45	0.50	5
2	Non return of Library materials	3 27.3%	1.73	0.47	7	8 42.1%	1.58	0.51	7	19 40.4%	1.60	0.50	8
3	Tearing pages	7 63.6%	1.36	0.51	2	16 84.2%	1.16	0.38	1	35 74.5%	1.26	0.44	2
4	Mutilation of resources	5 45.5%	1.55	0.52	5	8 42.1%	1.58	0.51	7	20 42.6%	1.57	0.50	7
5	Torn book spine	7 63.6%	1.36	0.51	2	10 52.6%	1.47	0.51	4	31 66.0%	1.34	0.48	4
6	Misplacement and displacement	10 90.9%	1.09	0.30	1	14 73.7%	1.26	0.45	2	36 76.6%	1.23	0.43	1
7	Using someone's identity to borrow	3 27.3%	1.73	0.47	7	9 47.4%	1.53	0.51	5	14 29.8%	1.70	0.46	9
8	Borrowing books for friends and family members	1 9.1%	1.91	0.30	10	6 31.6%	1.68	0.48	10	22 46.8%	1.53	0.50	6
9	Environmental control (Temperature and Climate)	2 18.2%	1.82	0.41	9	8 42.1%	1.58	0.51	7	12 25.5%	1.74	0.44	10
10	Biological pests (Insects or worms)	6 54.5%	1.45	0.52	4	14 73.7%	1.26	0.45	2	33 70.2%	1.30	0.46	3

(M = Mean; R= Rank)

Table 5.27 reveals that in Government colleges, Misplacement (90.9%) is the major problem faced by the librarians in information source collection followed by tearing pages (63.6 %), and Torn book spine (63.6 %), Biological pests (54.5%), Theft of book (45.5%) and Mutilation of resources (45.5%), Non return of Library materials (27.3%) and Using someone's identity to borrow (27.3%), Environmental control (18.2%) and Borrowing books for friends and family members (9.1%) whereas in Government Aided colleges, Tearing pages (84.2%) is the major problem faced by the librarians in information source collection followed by Misplacement (73.7%) and Biological pests (73.7%), Torn book spine (52.6%), Theft of book (47.4%) and Using someone's identity to borrow (47.4%), Non return of Library materials (42.1%), Mutilation of resources (42.1%) and Environmental control (42.1%) and Borrowing books for friends and family members (31.6%) and Misplacement (76.6%) is the major problem and Environmental control (25.5%) is the least problem encountered by Self finance college librarians.

It is inferred that Misplacement of documents by the users is the major problem in information source collection faced by the Government and Self Finance College Libraries whereas Tearing pages is the major problem faced by Government Aided college libraries. Borrowing books for friends and family members is the least problem faced by Government and Government Aided college librarians whereas Environmental control is the least issue in Self finance college libraries.

5.1.10 SECURITY MEASURES

The study ascertained the security measures taken by the librarians. Six measures were identified and analysed on nominal scale. The mean and standard deviation are calculated and ranks are given based on mean. The weightage is assigned from the least to the highest and the same is shown in Table 5.28.

Table 5.28

Security Measures

S. No.	Description	Responses	Mean	SD	Rank
1	Electronic security systems (RFID)	4 5.2%	1.95	0.22	6
2	Manual Security	60 77.9%	1.22	0.42	4
3	Checking Users identity card	66 85.7%	1.14	0.35	3
4	Staff to keep vigilance	73 94.8%	1.05	0.22	1
5	Shelving and rectification	72 93.5%	1.06	0.25	2
6	Discouraging the users to get books for their friends and relatives	53 68.8%	1.31	0.47	5

It is evident from the table 5.28 that 94.8 percent of the librarians are regularly visited in stack rooms. It is followed by Shelving and rectification (93.5%), Checking Users' identity card (85.7%), Appointing of Manual Security (77.9%), Discouraging the users to get books for their friends and relatives (68.8%). Proper shelving of documents helps to locate misplaced documents. Only 5.2 percent of librarians have used Electronic security systems (like RFID). Standard deviation ranges from 0.22 to 0.47.

Library faculties frequently visiting in stack rooms is the most preferred security measure. Electronic security systems (RFID) is the least security measure taken by librarians because of the cost of equipments.

5.1.10.1 Security Measures Vs Gender

Security measures have been analysed by male and female librarians. The mean and standard deviation are also calculated and ranks are given based on mean and the same is shown in Table 5.29.

Table 5.29

Security Measures Vs Gender

S. No.	Description	Male n = 41				Female n = 36			
		RE	Mean	SD	R	RE	Mean	SD	R
1	Electronic security systems (RFID)	3 7.3%	1.93	0.26	6	1 2.8%	1.97	0.17	6
2	Manual Security	32 78%	1.22	0.42	4	28 77.8%	1.22	0.42	4
3	Checking Users ID card	36 87.8%	1.12	0.33	3	30 83.3%	1.17	0.38	3
4	Staff to keep vigilance	40 97.6%	1.02	0.16	1	33 91.7%	1.08	0.28	2
5	Shelving and rectification	38 92.7%	1.07	0.26	2	34 94.4%	1.06	0.23	1
6	Discouraging the users to get books for their friends and relatives	31 75.6%	1.24	0.44	5	22 61.1%	1.39	0.49	5

(RE = Responses; R = Rank)

Table 5.29 depicts that 97.6 percent of male librarians are visited in stack rooms by the library staff members but 91.7 percent of female librarians are visited. 94.4 percent of female librarians are shelved documents in proper places and rectified in frequently whereas 92.7 percent of male librarians shelved them. It represents that 87.8 percent of male librarians are checking users' identity card because of identifying the non-users rather than female librarians (83.3%). There is only a slight variation in percent between male (78%) and female (77.8%) librarians in appointing Manual security in libraries. High percent of male (75.6%) librarians have discouraged the users to get books for their friends and relatives from libraries rather than female (61.1%) librarians.

Vigilance rounds by the library staff members is mostly followed by male librarians whereas Proper shelving and rectification in frequently are mostly followed by female librarians. An electronic security system (RFID) is the least technique used by male and female librarians.

5.1.10.2. Security Measures Vs Types of institution

Security measures have been analysed by types of institution. The mean and standard deviation are also calculated and the ranks are assigned on the basis of mean and standard deviation. The same is shown in Table 5.30.

Table 5.30
Security Measures Vs Types of institution

S. No.	Description	Government n = 11				Government aided n = 19				Self financing n = 47			
		RE	M	SD	R	RE	M	SD	R	RE	M	SD	R
1	Electronic security systems (RFID)	2 18.2%	1.82	0.41	6	2 10.5%	1.89	0.32	6	0 0%	2	0	6
2	Manual Security	9 81.8%	1.18	0.41	1	16 84.2%	1.16	0.38	4	35 74.5%	1.26	0.44	4
3	Checking Users identity card	9 81.8%	1.18	0.41	1	17 89.5%	1.11	0.32	3	40 85.1%	1.15	0.36	3
4	Staff to keep vigilance	9 81.8%	1.18	0.41	1	19 100%	1.00	0	1	45 95.7%	1.04	0.2	1
5	Shelving and rectification	9 81.8%	1.18	0.41	1	18 94.7%	1.05	0.23	2	45 95.7%	1.04	0.2	1
6	Discouraging the users to get books for their friends and relatives	7 63.6%	1.36	0.51	5	14 73.7%	1.26	0.45	5	32 68.1%	1.32	0.47	5

(RE = Responses; M = Mean; R = Rank)

Table 5.30 reveals that Government (18.2%) and Government Aided (10.5%) colleges have applied Electronic security systems in their libraries but Self Finance Colleges did not apply Electronic security systems. 84.2 percent of Government College have appointed manual security but 81.8 percent of Government Colleges have appointed them and 74.5 percent of self finance colleges have also appointed security. It is observed that above 80 percent of Government (81.8%), Government Aided (89.5%) and Self Finance (85.1%) college libraries' users have been permitted in the library after the checking of their identity cards. Cent percent of Government Aided college library faculty members have visited stack rooms at regularly whereas 95.7 percent of Self finance college librarians have visited and 81.8 percent of Government college librarians have visited. A good level of percent Government (81.8%), Government Aided (94.7%) and Self finance (95.7%) college librarians are regularly busy with shelving and rectification of documents in their libraries which helps to reduce misuse of documents among the users. It further reveals that 73.7 percent of Government aided college librarians have discouraged the users to borrow the books for their friends and relatives rather than Self finance (68.1%) and Government college (63.6%) librarians.

Vigilance rounds by the library staff members is the highest rank among Government, Government Aided and Self Finance College libraries related to security measures. Equal numbers of respondent government librarians are using Manual Security, Checking Users' ID card, Staff to keep vigilance and shelving and rectification. An electronic security system is the least security measure applied by Government, Government Aided and Self Finance college librarians.

5.1.11 PRESERVATION OF INFORMATION SOURCES

Preservation of information source is an important aspect of library and information resource management. Preservation is the task of minimizing or reducing the physical deterioration of documents.

The study is to analyse various methods to be considered by the librarian respondents to preserve the information sources. Seven variables were identified and ascertained on nominal scale. Mean and standard deviation are calculated and the ranks are assigned based on the same. The weightage is assigned from the least to the highest and the same is given in Table 5.31.

Table 5.31

Preservation of Information Sources

S. No.	Description	Responses	Mean	SD	Rank
1	Utilization of professional preservators /conservators	22 28.6%	1.71	0.46	6
2	Cleaning and Dusting	72 93.5%	1.06	0.25	1
3	Good ventilation	70 90.9%	1.09	0.29	3
4	Proper shelving	72 93.5%	1.06	0.25	1
5	Training to users and library staff	53 68.8%	1.31	0.47	4
6	Humidity measures	27 35.1%	1.65	0.48	5
7	Digital Preservation	18 23.4%	1.77	0.43	7

Table 5.31 pointed that 93.5 percent of librarians used Cleaning and dusting and Proper shelving as major techniques to preserve the information sources. It is followed by Good ventilation (90.9%), Training to users and library staff (68.8%). 35.1 percent of librarians measured humidity level. It reveals that 28.6 percent of librarians used Professional preservators and conservators to preserve the information sources. 23.4 percent of librarians used digital preservation techniques. **Ovowoh** and **Enemute** (2010) stated that good ventilation is paramount in preserving library materials and will make for longevity of the information materials..

It is clearly evident from the table 5.31 that Cleaning and dusting and Proper shelving are the major factors which influence to preserve information resources followed by good ventilation and digital preservation is the least factor used by librarians.

5.1.11.1 Preservation of Information Sources VsGender

Preservation of information sources are analysed by gender. The mean and standard deviation are calculated. Ranks are assigned based on the above and presented in Table 5.32

Table 5.32

Preservation of Information Sources Vs Gender

S. No.	Description	Male n = 41				Female n = 36			
		RE	Mean	SD	R	RE	Mean	SD	R
1	Utilization of professional preservators/ conservators	11 26.8%	1.73	0.45	7	11 30.6%	1.69	0.47	6
2	Cleaning and Dusting	37 90.2%	1.1	0.3	3	35 97.2%	1.03	0.17	1
3	Good ventilation	38 92.7%	1.07	0.26	2	32 88.9%	1.11	0.32	2
4	Proper shelving	40 97.6%	1.02	0.16	1	32 88.9%	1.11	0.32	2
5	Training to users and library staff	28 68.3%	1.32	0.47	4	25 69.4%	1.31	0.47	4
6	Humidity measures	14 34.1%	1.66	0.48	5	13 36.1%	1.64	00.49	5
7	Digital Preservation	12 29.3%	1.71	0.46	6	6 16.7%	1.83	0.38	7

(RE = Responses; R = Rank)

It is observed from the table 5.32 that 30.6 percent of female librarians use professional preservators and conservators to preserve information sources and 26.8 percent of male librarians use their services. Above 90 percent of male (90.2%) and female (97.2%) librarians use cleaning and dusting process in their libraries. It indicates that 97.6 percent of male librarians shelve documents properly and then female librarians (88.9%). Both male (92.7%) and female (88.9%) librarians' maintain good ventilation in their libraries. It also reveals that 69.4 percent of female librarians give tips to users and library staff related to use of information sources. Minimum percent of male (34.1%) and female (32.1%) librarians measured humidity in the library. Further, it reveals that less number of male (29.3%) and female (16.7%) librarians preserve digital content in the library.

It is observed that male librarians use Proper shelving technique to preserve the information sources but female librarians use Cleaning and dusting process. Good ventilation is the second process used among male and female librarians. Utilization of professional preservators/ conservators is the least process used by male librarians but Female librarians use digital preservation.

5.1.11.2 Preservation of Information Sources Vs Location

The study is further extended to location. The mean and standard deviation are calculated and the ranks are assigned based on mean and standard deviation. The same is presented in Table 5.33.

Table 5.33

Preservation of Information Sources Vs Location

S. No.	Description	Rural n = 39				Semi urban n = 16				Urban n = 22			
		Responses	M	SD	R	Responses	M	SD	R	Responses	M	SD	R
1	Utilization of professional preservators and conservators	8 20.5%	1.79	0.41	6	3 18.8%	1.81	0.40	5	11 50%	1.50	0.51	5
2	Cleaning and Dusting	38 97.4%	1.03	0.16	1	15 93.8%	1.06	0.25	1	19 86.4%	1.14	0.35	2
3	Good ventilation	35 89.7%	1.10	0.31	3	15 93.8%	1.06	0.25	1	20 90.9%	1.09	0.29	1
4	Proper shelving	37 94.9%	1.05	0.22	2	15 93.8%	1.06	0.25	1	20 90.9%	1.09	0.29	1
5	Training to users and library staff	26 66.7%	1.33	0.48	4	10 62.5%	1.38	0.5	2	17 77.3%	1.23	0.43	3
6	Humidity measures	9 23.1%	1.77	0.43	5	5 31.3%	1.69	0.48	4	13 59.1%	1.41	0.50	4
7	Digital Preservation	7 17.9%	1.82	0.39	7	3 18.8%	1.81	0.40	6	8 36.4%	1.64	0.49	7

(M = Mean; R = Rank)

It can be seen from the table 5.33 that 97.4 percent of Rural libraries use cleaning and dusting process in their libraries when compared to Semi urban (93.8%) and Urban (86.4%) college libraries. Semi urban (98.8%) college libraries are more highly maintained ventilation in libraries than Urban (90.9%) and Rural (89.7%) libraries. Above 90 percent of Rural (94.9%), Semi urban (93.8%) and Urban (90.9%) college libraries have arranged documents properly. Urban (77.3%) libraries more highly train users to handle the library sources than the Rural (66.7%) and Semi urban (62.5%) college libraries. It is inferred that 59.1 percent of Urban College libraries measure humidity in libraries and less number of Rural (23.1%) and Semi Urban (31.3%) College libraries measured humidity. It is viewed that 50 percent of Urban College libraries use professional preservators and conservators in preservation of library sources and less number of Rural (20.5%) and Semi urban (18.8%) college libraries use Professional preservators and conservators. Minimum number of Rural (17.9%), Semi urban (18.8%) and Urban (36.4%) College libraries apply preservation technique in digital resources.

It is evident from the table 5.33 that Rural college libraries use Cleaning and Dusting process in preserving information sources, Semi Urban College libraries highly use Cleaning and Dusting, Good ventilation and Proper shelving process to preserve information sources and Urban college libraries follow Good ventilation and Proper shelving process in preserving information sources.

5.1.11.3 Preservation of Information Sources Vs Types of institution

The methods of preservation are further ascertained by types of institution. Mean and Standard deviations are calculated and the same is shown in Table 5.34.

Table 5.34

Preservation of Information Sources Vs Types of institution

S. No.	Description	Government n = 11				Government Aided n = 19				Self finance n = 47			
		RE	M	SD	R	RE	M	SD	R	RE	M	SD	R
1	Utilization of professional preservators and conservators	3 27.3%	1.73	0.47	6	6 31.6%	1.68	0.48	6	13 27.7%	1.72	0.45	6
2	Cleaning and Dusting	10 90.9%	1.09	0.30	1	17 89.5%	1.11	0.32	2	45 95.7%	1.04	0.20	1
3	Good ventilation	9 81.8%	1.18	0.41	3	19 100%	1	0	1	42 89.4%	1.11	0.31	3
4	Proper shelving	10 90.9%	1.09	0.30	1	19 100%	1	0	1	43 91.5%	1.09	0.28	2
5	Training to users and library staff	7 63.6%	1.36	0.505	4	17 89.5%	1.11	0.32	2	29 61.7%	1.38	0.49	4
6	Humidity measures	5 45.5%	1.55	0.522	5	9 47.4%	1.53	0.51	4	13 27.7%	1.72	0.45	6
7	Digital Preservation	2 18.2%	1.82	0.405	7	8 42.1%	1.58	0.51	5	8 17%	1.83	0.38	7

(RE = Responses, M = Mean; R = Rank)

Table 5.34 shows that 90.9 percent of Government college libraries concentrated Cleaning and dusting and Proper shelving of information sources process which is followed by Good ventilation (81.8%), Training to users and library staff (63.6%) and Humidity measures (45.5%). It also shows that few Government college librarians used professional preservators and conservators (27.3%) and Digital Preservation (18.2%) in preserving information sources. It can be seen from the table that 100% of Government Aided college libraries maintain ventilation and Proper shelving of information sources which is followed by Training to users and library staff (89.5%), Cleaning and Dusting (89.5%), Humidity measures (47.4%) and Digital preservation (42.1%) and 31.6 percent of libraries use professional preservators and conservators. 95.7 percent of Self finance college libraries concentrated Cleaning and dusting which is followed by Prober shelving (91.5%), Good ventilation (89.4%), Training to users and library staff (61.7%) and less number of respondents used Professional preservators and conservators (27.7%) and Digital preservation (17%) to preserve the information sources.

From the table 5.34 it is understood that Government college libraries highly used Cleaning and dusting and proper shelving process in preserving of information sources where as Government Aided college libraries concentrated on ventilation and shelving of information sources in preserving information sources and Self finance college libraries concentrated on Cleaning and Dusting process.

5.1.12 INFORMATION RESOURCE MANAGEMENT SKILL

Information Resource Management skill is defined as developed capacities used to collect, create, organize, use and disseminate information resources efficiently. The study is analysed level of various skills possessed by librarians related to Information Resource Management. Ten skills were identified and ascertained on three point scale such as "*Good*", "*Moderate*" and "*Poor*". Mean and standard deviation are calculated and the ranks are assigned based on the same. The weightage is assigned from the least to the highest and the same is shown in Table 5.35.

Table 5.35

Information Resource Management Skill

S. No.	Description	Good	Moderate	Poor	Mean	SD	Rank
1	Collection Management skill	36 46.8%	38 49.4%	3 3.9%	1.57	0.57	1
2	Collection development skill	19 24.7%	56 72.7%	2 2.6%	1.78	0.48	4
3	ICT skill	15 19.5%	48 62.3%	14 18.2%	1.99	0.62	6
4	Services skill	30 39%	45 58.4%	2 2.6%	1.64	0.54	2
5	Preservation skill	16 20.8%	34 44.2%	27 35.1%	2.14	0.74	9
6	Maintenance skill	27 35.1%	48 62.3%	2 2.6%	1.68	0.52	3
7	Record Management skill	16 20.8%	57 74%	4 5.2%	1.84	0.49	5
8	Budget skill	16 20.8%	46 59.7%	15 19.5%	1.99	0.64	7
9	Negotiation skill	9 11.7%	37 48.1%	31 40.3%	2.29	0.67	10
10	Liaison skill	14 18.2%	43 55.8%	20 26.0%	2.08	0.66	8

It is clear from the table 5.35 that librarians have possessed a good level of Collection management skill (46.8%) and ranked first followed by Services skill (39%) with second rank. Third rank of Information Resource Management skill possessed by librarians is Maintenance skill (35.1%). It is learnt that Collection Development skill (72.7%), Record maintenance skill (74%), ICT skill (62.3%), Budget skill (59.7%) and Liaison skill (55.8%) are possessed by librarians at moderate level. It further reveals that librarians have possessed Preservation (35.1%) and Negotiation skill (40.3%) at a poor level.

It is observed from the table 5.35 that majority of the librarians are highly skilled in collection management. It is followed by Service skill, Maintenance skill, and Collection development skill, Record management skill, Budget skill and Liaison skill. The librarians do not have a good level of skill in Preservation and Negotiation.

5.1.12.1 Proximity matrix for Information Resource Management Skill

The analysis of Information Resource Management skills among Arts and Science College librarian has also been examined through Proximity Matrix. For easy presentation, the proximities for ten of the cases have been presented in Table 5.36.

Table 5.36

Proximity Matrix for Information Resource Management Skill

S. No.	Description	1	2	3	4	5	6	7	8	9	10
1	Collection Management skill	.000									
2	Collection Development skill	26	.000								
3	ICT skill	48	34	.000							
4	Services skill	19	27	39	.000						
5	Preservation skill	76	44	50	65	.000					
6	Maintenance skill	28	20	42	21	54	.000				
7	Record Management skill	31	19	33	26	45	19	.000			
8	Budget skill	54	30	46	49	30	42	29	.000		
9	Negotiation skill	87	57	57	74	45	65	56	33	.000	
10	Liaison skill	63	45	43	60	53	63	46	35	38	.000

By examining the proximities, Table 5.36 reveals interesting details, such as that

- " Service skill" and "Collection management skill",
  "Record management skill" and "Collection development skill" and
  "Record management skill" and "Maintenance skill" are similar with a squared distance value of 19
- "Negotiation skill" and "Collection management skill" are the two most dissimilar cases with a squared distance of 87.

5.1.12.2 Cluster Analysis for IRM Skills

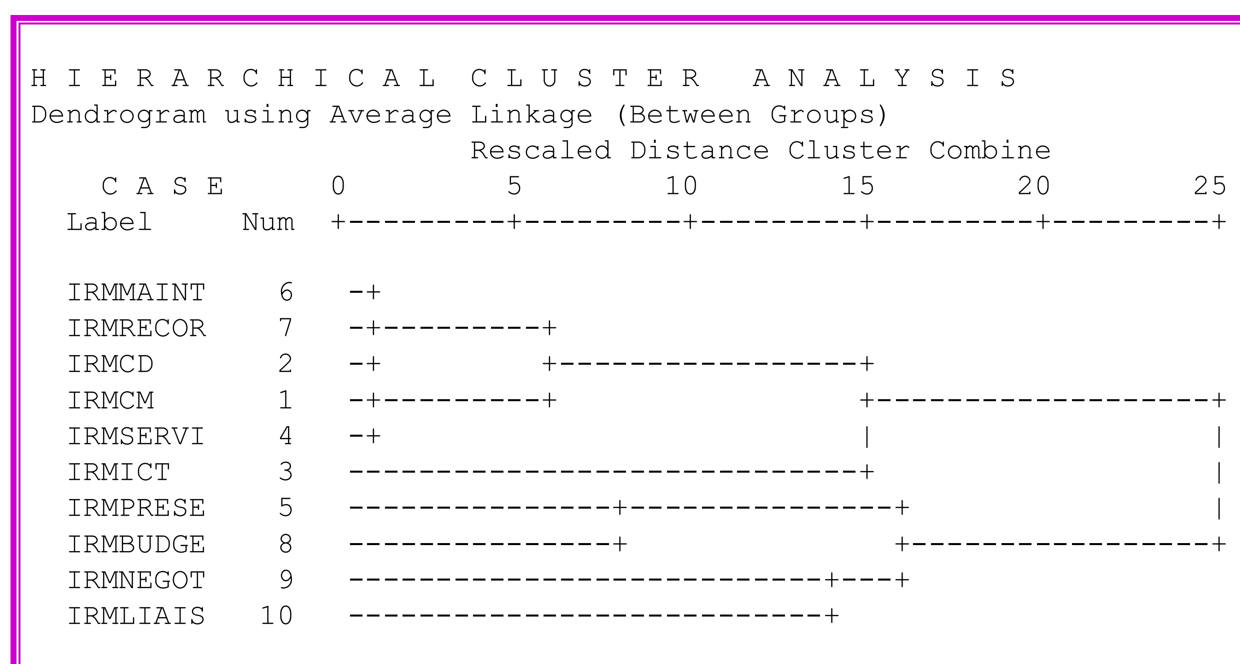


Figure 5.5 Cluster analysis of IRM Skill

To have a clear picture, the responses have also been subjected to cluster analysis. In the Dendrogram, figure 5.5 that has been derived from 'Average linkage method' and three clusters have been formed. The first cluster has been grouped with the variables of "*Maintenance skill*", "*Record Management skill*", "*Collection Development Skill", "Collection Management skill", "Services skill*" and "*ICT skill"* are named as "**User based skills**". The second cluster has been grouped with the variables of "Preservation skill", "Budget skill", are named as "**Administrative based skills**". The third cluster has been grouped with the variables of "Negotiation skill" and "Liaison skill" are named as "**Relation skills**".

5.1.12.3 Information Resource Management Skill Vs Gender

Information Resource Management skill is analysed by gender. The mean and standard deviation are calculated and the ranks are assigned. The same is presented in Table 5.37

Table 5.37

Information Resource Management skill Vs Gender

S. No.	Description	Male n = 41						Female n = 36					
		G	MO	P	M	SD	R	G	MO	P	M	SD	R
1	Collection Management skill	21 51.2%	19 46.3%	1 2.4%	1.51	0.55	1	15 41.7%	19 52.8%	2 5.6%	1.64	0.59	1
2	Collection Development skill	12 29.3%	29 70.7%	0 0%	1.71	0.46	4	7 19.4%	27 75%	2 5.6%	1.86	0.49	4
3	ICT skill	9 22%	28 68.3%	4 9.8%	1.88	0.56	6	6 16.7%	20 55.6%	10 27.8%	2.11	0.67	7
4	Service skill	19 46.3%	21 51.2%	1 2.4%	1.56	0.55	2	11 30.6%	24 66.7%	1 2.8%	1.72	0.51	3
5	Preservation skill	9 22%	20 48.8%	12 29.3%	2.07	0.72	9	7 19.4%	14 38.9%	15 41.7%	2.22	0.76	9
6	Maintenance skill	14 34.1%	26 63.4%	1 2.4%	1.68	0.52	3	13 36.1%	22 61.1%	1 2.8%	1.67	0.53	2
7	Record Management skill	10 24.4%	30 73.2%	1 2.4%	1.78	0.48	5	6 16.7%	27 75%	3 8.3%	1.92	0.50	5
8	Budget skill	8 19.5%	27 65.9%	6 14.6%	1.95	0.59	7	8 22.2%	19 52.8%	9 25%	2.03	0.70	6
9	Negotiation skill	4 9.8%	22 53.7%	15 36.6%	2.27	0.63	10	5 13.9%	15 41.7%	16 44.4%	2.31	0.71	10
10	Liaison skill	7 17.1%	26 63.4%	8 19.5%	2.02	0.61	8	7 19.4%	17 47.2%	12 33.3%	2.14	0.72	8

(G = Good; MO = Moderate; P = Poor; M = Mean; R = Rank)

It is clear from the table 5.37 that male librarians (51.2%) have a good level of Collection management skill whereas female librarians (52.8%) have a moderate level. Collection development and ICT skill are possessed by male (70.7 % and 68.3% respectively) and female (75 % and 55.6% respectively) librarians at a moderate level. Female librarians (61.1%) have possessed Maintenance skill in the second rank whereas male librarians (63.4%) are in the third rank at a moderate level. It is further analysed that 46.3 percent of the male librarians are highly skilled in service rather than the female librarians (30.6%). Preservation skill is also possessed at a moderate level by male (48.8%) and female (38.9%) librarians. The record management skill among the librarians has a moderate level with slight improvement in female (75 %) librarians rather than male ones (73.2%).

It is learnt from the table 5.37 that male librarians are highly skilled in Collection maintenance followed by Service and Maintenance skill whereas female librarians practise Collection maintenance followed by Maintenance and Service skill. It is concluded from the table 5.37 that Budget, Negotiation, Liaison skills are needed to improve the male and female librarians.

5.1.12.4 Information Resource Management skill Vs Types of Institution

Information Resource Management skill is further extended to types of institution on three point scale. The mean and standard deviation are calculated and the ranks are assigned based on the same and presented in Table 5.38.

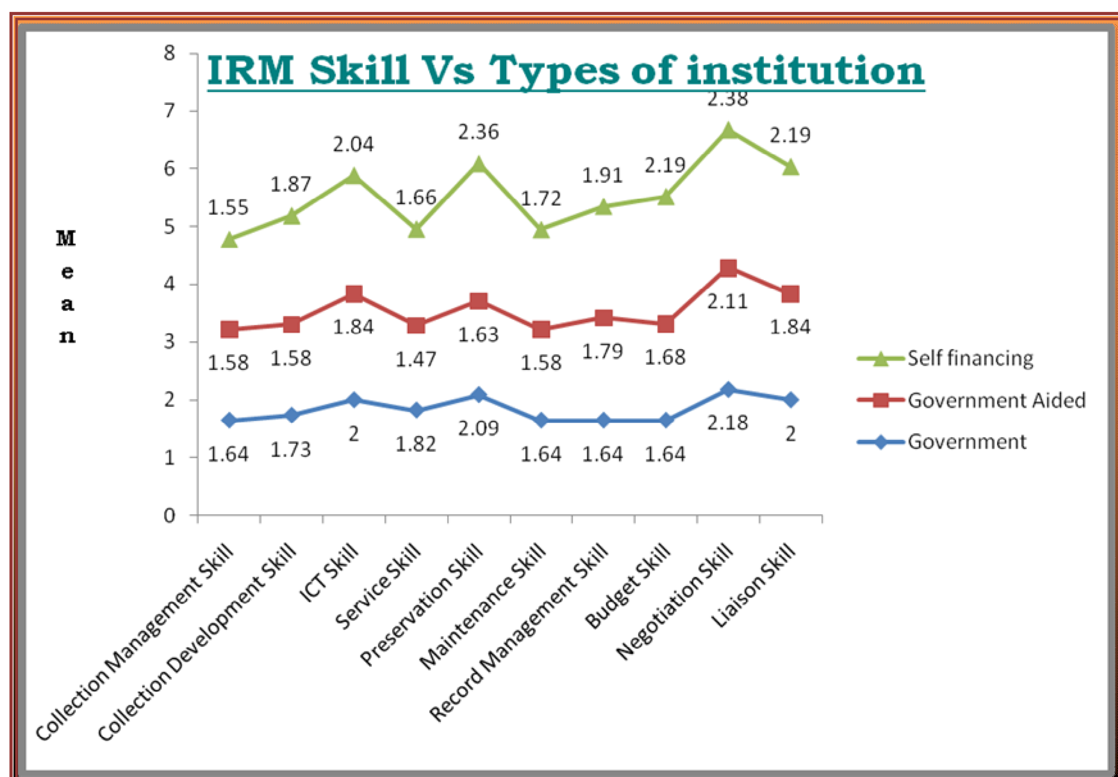


Figure 5.6 Information Resource Management skill Vs Types of Institution

Table5.38

Information Resource Management skill Vs Types of the Institution

S. No.	Description	Government n = 11						Government Aided n = 19						Self finance n = 47					
		G	MO	P	M	SD	R	G	MO	P	M	SD	R	G	MO	P	M	SD	R
1	Collection Management skill	4 36.4%	7 63.6%	0 0%	1.64	0.50	1	9 47.4%	9 47.4%	1 5.3%	1.58	0.61	4	23 48.9%	22 46.8%	2 4.3%	1.55	0.58	1
2	Collection Development skill	3 27.3%	8 72.7%	0 0%	1.73	0.47	5	8 42.1%	11 57.9%	0 .0%	1.58	0.51	2	8 17.0%	37 78.7%	2 4.3%	1.87	0.45	4
3	ICT skill	2 18.2%	7 63.6%	2 18.2%	2.00	0.63	7	6 31.6%	10 52.6%	3 15.8%	1.84	0.69	9	7 14.9%	31 66.0%	9 19.1%	2.04	0.59	6
4	Service skill	2 18.2%	9 81.8%	0 0%	1.82	0.40	6	10 52.6%	9 47.4%	0 0%	1.47	0.51	1	18 38.3%	27 57.4%	2 4.3%	1.66	0.56	2
5	Preservation skill	2 18.2%	6 54.5%	3 27.3%	2.09	0.70	9	9 47.4%	8 42.1%	2 10.5%	1.63	0.68	5	5 10.6%	20 42.6%	22 46.8%	2.36	0.67	9
6	Maintenance skill	4 36.4%	7 63.6%	0 0%	1.64	0.50	1	8 42.1%	11 57.9%	0 0%	1.58	0.51	2	15 31.9%	30 63.8%	2 4.3%	1.72	0.54	3
7	Record Management skill	4 36.4%	7 63.6%	0 0%	1.64	0.50	1	5 26.3%	13 68.4%	1 5.3%	1.79	0.54	7	7 14.9%	37 78.7%	3 6.4%	1.91	0.46	5
8	Budget skill	4 36.4%	7 63.6%	0 0%	1.64	0.50	1	6 31.6%	13 68.4%	0 .0%	1.68	0.48	6	6 12.8%	26 55.3%	15 31.9%	2.19	0.65	7
9	Negotiation skill	1 9.1%	7 63.6%	3 27.3%	2.18	0.60	10	3 15.8%	11 57.9%	5 26.3%	2.11	0.66	10	5 10.6%	19 40.4%	23 48.9%	2.38	0.68	10
10	Liaison skill	3 27.3%	5 45.5%	3 27.3%	2.00	0.77	8	5 26.3%	12 63.2%	2 10.5%	1.84	0.60	8	6 12.8%	26 55.3%	15 31.9%	2.19	0.65	8

(G = Good; MO = Moderate; P = Poor; M = Mean; R = Rank)

Table 5.38 depicts that majority of Government Aided (47.4) and Self finance (48 %) college librarians have a good level of Collection management skill whereas Government college (63.6%) librarians have a moderate level. All types of librarians feel that they have a Collection development skill at a moderate level and shows a level of skills with a slight increase in self finance college (78.7%) librarians compared with Government (72.7%) and Government aided (57.9 %) college librarians. It is also inferred that Government (63.6%), Government Aided (52.6%) and Self finance (66%) college librarians have possessed ICT skill at a moderate level. Government Aided (52.6%) college librarians are good in service skill whereas Government (81.8%) and Self finance (57.4%) college librarians are moderate. Majority of Government Aided (47.4%) college librarians have possessed a good level of Preservation skill whereas Government librarians (54.5%) with a moderate level and Self finance college librarians (46.8%) with a poor level of Preservation skill. Maintenance, Record management, Budget and Liaison skill are possessed at a moderate level by Government (63.6%, 63.6%, 63.6% and 45.5% respectively), Government Aided (57.9%, 68.4%, 68.4% and 63.2% respectively) and Self finance (63.8%, 78.7%, 55.3% and 55.3% respectively) college librarians. It reveals that Self finance college librarians (48.9) have possessed a poor level of Negotiation skill whereas Government (63.6%) and Government Aided (57.9%) college librarians at a moderate level.

It can be seen from the table 5.38 that Government Aided college librarians felt, they have Collection Management, Maintenance, Record Management and Budget Skill at a high level whereas Government Aided librarians have service skill and Self finance college librarians have Collection Management skill. It is felt that all types of college librarians have to improve negotiation skill.

5.1.12.5 Information Resource Management Skill Vs Experience

Information Resource Management skill is extended to experience of librarians on three point scale. The mean and standard deviation are calculated and the ranks are assigned based on the same and presented in Table 5.39.

Table 5.39

Information Resource Management Skill Vs Experience

S. No.	Description	Below 5 years n = 29						5 – 10 years n = 24						Above 10 years n = 24						Chi square
		G	MO	P	M	SD	R	G	MO	P	M	SD	R	G	MO	P	M	SD	R	
1	Collection Management skill	11 37.9%	17 58.6%	1 3.4%	1.66	0.55	2	15 62.5%	7 29.2%	2 8.3%	1.46	0.66	1	10 41.7%	14 58.3%	0 .0%	1.58	0.50	2	6.930
2	Collection Development skill	7 24.1%	21 72.4%	1 3.4%	1.79	0.49	3	4 16.7%	19 79.2%	1 4.2%	1.88	0.45	5	8 33.3%	16 66.7%	0 0%	1.67	0.48	3	2.547
3	ICT skill	4 13.8%	19 65.5%	6 20.7%	2.07	0.59	7	4 16.7%	16 66.7%	4 16.7%	2.00	0.59	7	7 29.2%	13 54.2%	4 16.7%	1.88	0.68	6	2.272
4	Services skill	7 24.1%	21 72.4%	1 3.4%	1.79	0.49	3	11 45.8%	12 50%	1 4.2%	1.58	0.58	2	12 50%	12 50%	0 0%	1.50	0.51	1	5.163
5	Preservation skill	5 17.2%	11 37.9%	13 44.8%	2.28	0.75	9	3 12.5%	13 54.2%	8 33.3%	2.21	0.66	9	8 33.3%	10 41.7%	6 25%	1.92	0.78	7	5.122
6	Maintenance skill	10 34.5%	19 65.5%	0 0%	1.66	0.48	1	9 37.5%	13 54.2%	2 8.3%	1.71	0.62	3	8 33.3%	16 66.7%	0 0%	1.67	0.48	3	4.857
7	Record Management skill	4 13.8%	23 79.3%	2 6.9%	1.93	0.46	5	7 29.2%	16 66.7%	1 4.2%	1.75	0.53	4	5 20.8%	18 75%	1 4.2%	1.83	0.48	5	2.041
8	Budget skill	7 24.1%	14 48.3%	8 27.6%	2.03	0.73	6	4 16.7%	17 70.8%	3 12.5%	1.96	0.55	6	5 20.8%	15 62.5%	4 16.7%	1.96	0.62	8	3.192
9	Negotiation skill	4 13.8%	10 34.5%	15 51.7%	2.38	0.73	10	1 4.2%	16 66.7%	7 29.2%	2.25	0.53	10	4 16.7%	11 45.8%	9 37.5%	2.21	0.72	10	6.373
10	Liaison skill	5 17.2%	15 51.7%	9 31%	2.14	0.69	8	3 12.5%	17 70.8%	4 16.7%	2.04	0.55	8	6 25.0%	11 45.8%	7 29.2%	2.04	0.75	9	3.719

(G = Good; MO = Moderate; P = Poor; M = Mean; R = Rank)

It can be seen from the table 5.39 that 62.5 percent of librarians with 6-10 years experience have a good level of Collection management skill whereas 41.7% of librarians with Above 10 years experience have a good level of skills and 37.9 percent of librarians with below 5 years experience have a good level of skills. Collection development , ICT, Service, Maintenance and Record Management skill are possessed by majority of librarians with below 5 years (72.4%, 65.5%, 72.4%, 65.5% and 79.3% respectively), librarians with 5 – 10 years (79.2%, 66.7%, 50%, 54.2% and 66.7% respectively) and above 10 years (66.7%, 54.2%, 50%, 66.7% and 75% respectively) experience at a moderate level. 70.8 percent of librarians with 5- 10 years experience have possessed Budget skill at a moderate level rather than librarians with above 10 years (62.5%) and librarians with below 5 years (48.3%) experience. Further it reveals that 44.8 percent of librarians with below 5 years experience are felt that they in need of training in preservation skill when compared to those librarians with 5 to 10 years (33.3%) and above 10 years (25%) experience. 51.7 percent librarians with below 5 years experience felt that they were poor in Negotiation skill rather than those librarians with above 10 years (45.8%) and 5 to 10 years (66.7%) experience at a moderate level.

Table 5.39 points out that librarians with below 5 years experience felt that they were highly skilful in Overall maintenance followed by Collection Management skill, Collection development skill and they wanted to develop Preservation and Negotiation skill. Librarians with 5–10 years experience felt that they were very good in Collection maintenance skill followed by Service and maintenance skill and they preferred to develop Preservation, Liaison and Negotiation skill. Librarians with above 10 years experience felt that they were highly skilled in Service, Collection Management and Collection development.

The Chi-Square test was thus administered to test the significant difference between the experience of librarians and Information Resource Management skills possessed by librarians. The calculated value 6.930 is less than the table value of 9.488 for degrees of freedom four at .05 significance level. Therefore, it is inferred that there is a significant difference between the experience of librarians and Information Resource Management skills possessed by librarians and the hypothesis is proved.

5.1.13 EVALUATION OF INFORMATION RESOURCES

Five methods of evaluation were identified and analysed on five point scale such as "*Most frequently use*", "*Frequently use*", "*Neutral*", "*Never*" and "Almost never. The weightage is assigned from the least to the highest and the same is given in the Table 5.40. Mean and Standard deviation are calculated and ranks are assigned based on the mean.

Table 5.40

Evaluation of Information Resources

S. No.	Description	Most Frequently Use	Frequently use	Neutral	Never	Almost Never	M	SD	R
1	User Survey	5 6.5%	52 67.5%	14 18.2%	3 3.9%	3 3.9%	2.31	0.82	4
2	Personal Communi cation	25 32.5%	33 42.9%	12 15.6%	3 3.9%	4 5.2%	2.06	1.06	3
3	Circulation Statistics	37 48.1%	36 46.8%	4 5.2%	0 0%	0 0%	1.57	0.59	1
4	User Statistics	54 70.1%	9 11.7%	9 11.7%	2 2.6%	3 3.9%	1.58	1.06	2
5	Feedback through Email	14 18.2%	15 19.5%	10 13%	35 45.5%	3 3.9%	2.97	1.25	5

(M = Mean; R = Rank)

It is clear from the table 5.40 that 67.5 percentage of library professionals frequently conducted user survey to know their needs and satisfaction, 42.9 percentage of library professionals frequently communicate with user to know their needs and satisfaction, All library professionals are maintained Circulation statistics , minimum number of library professionals never maintained user statistics (6.5%) and 49.4 percentage of librarians never got feedback through e mail from the users related to know their needs and satisfaction.

Majority of the library professionals have found the usage of information sources through circulation statistics followed by user statistics. Feed back through email is least adopted method to evaluate information sources.

5.1.13.1 Evaluation of Information Resources Vs Types of Institution.

Evaluation of information sources have been analysed by types of institution. The mean and standard deviation are also calculated and the ranks are assigned on the basis of mean and standard deviation. The same is shown in Table 5.41.

Table 5.41

Evaluation of Information Resources Vs Types of institution

S. No.	Description	Government n = 11								Government Aided n = 19								Self finance n = 47							
		MF	F	NE	N	AN	M	SD	R	MF	F	NE	N	AN	M	SD	R	MF	F	NE	N	AN	M	SD	R
1	User Survey	1 9.1%	9 81.8%	1 9.1%	0 0%	0 0%	2.00	0.45	2	0 0%	13 68.4%	6 31.6%	0 0%	0 0%	2.32	0.48	4	4 8.5%	30 63.8%	7 14.9%	3 6.4%	3 6.4%	2.38	0.97	4
2	Personal Communication	3 27.3%	7 63.6%	0 0%	0 0%	1 9.1%	2.00	1.10	3	7 36.8%	5 26.3%	5 26.3%	1 5.3%	1 5.3%	2.16	1.17	3	15 31.9%	21 44.7%	7 14.9%	2 4.3%	2 4.3%	2.04	1.02	3
3	Circulation Statistics	5 45.5%	6 54.5%	0 0%	0 0%	0 0%	1.55	0.52	1	14 73.7%	4 21.1%	1 5.3%	0 0%	0 0%	1.32	0.58	1	18 38.3%	26 55.3%	3 6.4%	0 0%	0 0%	1.68	0.59	2
4	User Statistics	5 45.5%	2 18.2%	2 18.2%	1 9.1%	1 9.1%	2.18	1.40	4	13 68.4%	2 10.5%	2 10.5%	1 5.3%	1 5.3%	1.68	1.20	2	36 76.6%	5 10.6%	5 10.6%	0 0%	1 2.1%	1.40	0.85	1
5	Feedback through Email	3 27.3%	3 27.3%	0 0%	5 45.5%	0 0%	2.64	1.36	5	6 31.6%	5 26.3%	4 21.1%	4 21.1%	0 0%	2.32	1.16	5	5 10.6%	7 14.9%	6 12.8%	26 55.3%	3 6.4%	3.32	1.14	5

(MF = Most Frequently Use; F= Frequently Use ; NE= Neutral; N= Never; AN = Almost never; M = Mean; R = Rank)

It is observed from the table 5.41 that Government college (81.8%) librarians are conducted user survey for evaluating usage of information sources in second rank whereas Government aided (68.4%) and Self financing college (63.8%) librarians in fourth rank. Government (63.6%), Government aided (26.3%) and Self financing college (44.7%) librarians are communicated with user in personnel communication in third rank.Circulation statistics have used to evaluate usage of information sources among Government (100%) and Government aided (94.2%) college librarians in first rank whereas Self financing college (93.6%) librarians used in second rank. User statistics have used to evaluate usage of information sources among and Self financing college (87.2%) librarians in first rank whereas Government aided (78.9%) college librarians in second rank and Government (63.7%) college librarians in fourth rank. Majority of the Government (45.5%), Government aided (21.1%) and Self financing college (61.7%) librarians are never used e - mail for getting feedback related to use of library.

It can be observed from the table 5.41 that circulation statistics have used to evaluate usage of information sources among Government and Government aided college librarians whereas Self financing librarians concentrated user statistics. Feedback through e - mail is least preferred method among Government, Government aided and Self financing college librarians.

5.2. USER OPINION TO INFORMATION RESOURCE MANAGEMENT

5.2.1 DEMOGRAPHIC DATA

Each library user respondent was asked seven demographic questions such as *"Gender", "Age", "Marital status" "Discipline", "Designation", "Location"* and "Types of the institution" and the same is shown in Table 5.42

Table 5.42

Demographic Profile of the Users

S. No.	Description		No. of Respondents	Percent
1	Age	21 and Below	140	35
		22-25	156	39
		Above 25	104	26
		Total	**400**	**100**
2	Gender	Male	151	37.8
		Female	249	62.3
		Total	**400**	**100**
3	Marital status	Married	111	27.8
		Unmarried	289	72.3
		Total	**400**	**100**
4	Discipline	Arts	167	41.8
		Science	233	58.3
		Total	**400**	**100**
5	Designation	U.G student	160	40
		P.G student	160	40
		Faculty	80	20
		Total	**400**	**100**
6	Nativity	Rural	191	47.8
		Semi urban	144	36
		Urban	65	16.3
		Total	**400**	**100**
7	Types of Institution	Government	100	25
		Government Aided	100	25
		Self financing	200	50
		Total	**400**	**100**

Table 5.42 shows that 62.3 percent of library user respondents are females and 37.8 percent of library user respondents are males, 58.3 percent of respondents belong to science discipline and 41.8 percent of respondents hail from arts. Equal percent of respondents (40%) are undergraduate and postgraduate students and 20 percent of respondents are faculty those who are teaching arts and science in colleges. 47.8 percent of respondents are from rural areas, 36 percent are from semi urban colleges and the remaining 16.3 percent are from urban colleges. Regarding marital status, 72.3 percent of respondents are unmarried and 27.8 percent are married. 39 percent of the respondents are in the age group of 22-25, 35 percent are in the age group of below21 and 26 percent are in the age group of above 25.

The table 5.42 shows that majority of the respondents are females and also majority of the respondents are from rural colleges. Equal share of respondents is from both undergraduate and postgraduate level. It is further inferred that most of the respondents are from science discipline.

5.2.2 LEVELS OF USER

The study analysed various levels of users related to Information Resource Management.

Table 5.43

Levels of Users

S. No.	Description		No. of Respondents	Percentage
1	Accessing of information resources	Direct access	166	41.5
		Library catalogue	172	43
		Library staff	62	15.5
		Total	**400**	**100**
2	Level of staff support	Always	263	65.8
		Sometimes	117	29.3
		Never	20	5
		Total	**400**	**100**
3	Seeking information resource outside the Library	Most of the time	132	33
		Some time	236	59
		Never	32	8
		Total	**400**	**100**
4	Skills for evaluating Information Resource Management	Good	82	20.5
		Average	246	61.5
		Poor	72	18
		Total	**400**	**100**

It is inferred that 43 percent of library users access information sources with the help of library catalogue. Users felt that library professionals always support to use information sources. 61.5 percent of the users are skilful in evaluation of Information Resource Management.

5.2.3 PURPOSE OF LIBRARY VISIT

The study analysed reasons for library visit by the respondents. Six sources are identified and opinions received from the respondents are ascertained on a three point scale such as "*Always*", "*Sometimes*" and "*Rarely*". The mean and standard deviation are calculated and ranks are also assigned. The weightage is assigned from the least to the highest and the same is shown in the Table 5.44.

Table 5.44
Purpose of Library Visit

S. No.	Description	Always	Sometimes	Rarely	Mean	SD	Rank
1	General reading	240 60%	125 31.3%	35 8.8%	1.49	0.65	3
2	Preparing class notes	275 68.8%	99 24.8%	26 6.5%	1.38	0.61	1
3	Borrowing books	264 66%	115 28.8%	21 5.3%	1.39	0.59	2
4	Reading newspaper	199 49.8%	173 43.3%	28 7%	1.57	0.62	4
5	Higher education and Placements	155 38.8%	189 47.3%	56 14%	1.75	0.68	5
6	Preparing Research papers	163 40.8%	139 34.8%	98 24.5%	1.84	0.79	6

It is found from the table 5.44 that 68.8 percent of respondents always visit library for Preparing class notes, 66 percent of respondents always visit library for Borrowing books, 60 percent of respondents always visit library for General reading. It is also found from the table that 49.8 percent of respondents always visit library for reading newspaper, 47.3percent of respondents sometimes visit library for Higher education and Placements and 24.5 percent of respondents rarely visit library for Preparing Research papers. **Lata** and **Sharma** (2013) report that majority of users (58.95%) visited the library for borrow books and this study also revealed that majority of users visit library (94.7% exclude of rarely) for Borrowing books from the library.

Table 5.44 shows that majority of the respondents visit library for Preparing class notes in library followed by Borrowing library books and General reading. Preparing research papers is the least reason for library visit among the respondents.

5.2.3.1 Purpose of Library Visit Vs Gender

The reasons for library visit by the respondents extended to gender. The mean and standard deviation are calculated and the same is shown in Table 5.45 along with ranks.

Table 5.45
Purpose of Library Visit Vs Gender

S. No.	Description	Male n = 151						Female n= 249					
		A	S	RA	M	SD	R	A	S	RA	M	SD	R
1	General reading	87 57.6%	48 31.8%	16 10.6%	1.53	0.68	3	153 61.4%	77 30.9%	19 7.6%	1.46	0.64	3
2	Preparing class notes	107 70.9%	35 23.2%	9 6%	1.35	0.59	2	168 67.5%	64 25.7%	17 6.8%	1.39	0.61	1
3	Borrowing books	106 70.2%	39 25.8%	6 4%	1.34	0.55	1	158 63.5%	76 30.5%	15 6%	1.43	0.61	2
4	Reading newspaper	81 53.6%	64 42.4%	6 4%	1.5	0.58	4	118 47.4%	109 43.8%	22 8.8%	1.61	0.64	4
5	Higher education and Placements	52 34.4%	80 53%	19 12.6%	1.78	0.65	6	103 41.4%	109 43.8%	37 14.9%	1.73	0.70	5
6	Preparing Research papers	72 47.7%	46 30.5%	33 21.9%	1.74	0.80	5	91 36.5%	93 37.3%	65 26.1%	1.9	0.79	6

(A = Always; S= Sometimes; RA= Rarely; M= Mean; R = Rank)

It is observed from the table 5.45 that 61.4 percent of female respondents always visit library for General reading more than the male respondents (57.6%). Preparing class notes (70.9%) and Borrowing books (70.2%) are major purposes of library visit by the male respondents rather than the female (67.5%, 63.5% respectively) respondents. 53.6 percent of male respondents always visit library for Newspaper reading a little more than the female (47.4%) respondents. 53 percent of male respondents sometimes visit library for using Higher education and Placements more than the female (43.8%) respondents and 26.1 percent of female respondents rarely visit library for Preparing Research papers more than the male (21.9%) respondents. It is clear from the table that majority of the male respondents visit library for borrowing books from the library followed by Preparing class notes whereas female respondents used library for Preparing class notes followed by library books. Higher education and Placements is the least purpose of library visit among male respondents whereas female respondents are Preparing research papers as the least.

5.2.3.2 Purpose of Library Visit Vs Types of institution

The reasons for library visit by the respondents is analysed by the types of institution. The mean and standard deviation are calculated and the same is presented in Table 5.46 and A1.1 along with ranks.

Table 5.46
Purpose of Library visit Vs Types of Institution

S. No.	Description	Government n= 100			Government Aided n= 100			Self finance n= 200			Chi square
		Mean	SD	R	Mean	SD	R	Mean	SD	R	
1	General reading	1.49	0.66	2	1.47	0.63	3	1.50	0.66	3	0.622
2	Preparing class notes	1.43	0.64	1	1.32	0.57	2	1.38	0.61	1	1.677
3	Borrowing books	1.51	0.66	3	1.28	0.51	1	1.39	0.57	2	8.383
4	Reading newspaper	1.63	0.65	4	1.51	0.61	4	1.58	0.61	4	2.206
5	Higher education and Placements	1.86	0.73	5	1.63	0.63	5	1.76	0.68	5	6.820
6	Preparing Research papers	2.16	0.84	6	1.65	0.78	6	1.77	0.73	6	35.120

(R = Rank)

The Chi-Square test was thus administered to test the significant association between the type of institutional library users and their purpose of visit. The calculated value 35.120 is greater than the table value of 9.488 for degrees of freedom four at .05 significance level. Therefore, it is inferred that there is no significant association between the type of institutional library users and their purpose of visit the hypothesis is proved.

It can be observed from the table 5.46 and A1.1that Government Aided (60%) and Self finance (60%) college respondents visit library for general reading with the third rank whereas Government (60%) college respondents visit library in the second rank. Government (65%) and Self finance (68.5 %) college respondents visit library for Preparing class notes in first rank whereas Government Aided (73%) college respondents visit library in the second rank. Regarding Borrowing books, Government aided (75%) college respondents visit library in the first rank whereas Self finance (65.5%) college respondents visit library in the third rank and Government (58%) college respondents visit library in the third rank. Government (46%), Government aided (55%) and Self finance (49%) college respondents visit library for Reading newspaper in the fourth rank. Regarding Higher education and Placements, Government (34%), Government Aided (45%) and Self finance (38%) college respondents visit library in the fifth rank. Government (28%), Government Aided (54%) and Self finance (40.5%) college respondents visit library for Preparing research papers in the sixth rank.

It is observed from the table 5.46 and A1.1 that majority of the Government college respondents visit library for Preparing class notes whereas Government Aided and Self finance college respondents visit library for Borrowing books. Newspaper reading, Higher education and Placements and Preparing research papers among the Government, Government aided and Self finance college respondents are in equal rank.

5.2.3.3 Purpose of Library Visit Vs Discipline

The reasons for library visit by the respondents is analysed by discipline. The mean and standard deviation are calculated and ranks are also assigned. The same is presented in Table 5.47 and A1.2.

Table 5.47
Purpose of Library Visit Vs Discipline

S. No.	Description	Arts n= 167			Science n= 233		
		Mean	SD	Rank	Mean	SD	Rank
1	General reading	1.47	0.65	3	1.50	0.66	3
2	Preparing class notes	1.32	0.56	1	1.42	0.63	2
3	Borrowing books	1.44	0.63	2	1.36	0.56	1
4	Reading newspaper	1.65	0.63	4	1.52	0.61	4
5	Higher education and Placements	1.73	0.68	5	1.77	0.69	5
6	Preparing Research papers	1.90	0.80	6	1.79	0.78	6

It is observed from the table 5.47 and A1.2 that General reading, Reading newspaper, Higher education and Placements and Preparing Research papers are of equal rank (three, four, five and six respectively) among arts (61.7%, 43.1%, 40.1% and 37.1% respectively) and science (58.8%, 54.5%, 37.8% and 43.3% respectively) discipline respondents. Preparing class notes is the first preference to visit library by the arts (73.1%) discipline respondents whereas science (65.7%) discipline respondents get the second rank. Borrowing books is the first preference to visit library by the science (68.2%) discipline respondents whereas arts (62.9%) discipline respondents score the second rank.

It is concluded from the table 5.47 and A1.2 that Preparing class notes is the major visit by the arts discipline respondents where as science discipline respondents' visit for Borrowing books. Preparing Research papers is the least reason to visit among arts and science discipline respondents.

5.2.4 USEFULNESS OF INFORMATION SOURCES

The study is analysed of the usefulness of information sources by the respondents. Seven sources were identified and opinions received from the respondents are ascertained on a three point scale such as "*Always*", "*Sometimes*" and "*Never*". The mean and standard deviation are calculated and ranks are also assigned. The weightage is assigned from the least to the highest and the same is shown in Table 5.48.

Table 5.48

Usefulness of Information Sources

S. No.	Description	Always	Sometimes	Never	Mean	SD	Rank
1	Textbooks	317 79.3%	76 19%	7 1.8%	1.23	0.46	1
2	General books	218 54.5%	151 37.8%	31 7.8%	1.53	0.64	4
3	Newspapers / Magazines	272 68%	92 23%	36 9%	1.41	0.65	2
4	Journals	209 52.3%	166 41.5%	25 6.3%	1.54	0.61	5
5	Reference source	235 58.8%	137 34.3%	28 7%	1.48	0.63	3
6	e- resources	107 26.8%	237 59.3%	56 14%	1.87	0.63	6
7	Thesis, Reports and Dissertation	59 14.8%	246 61.5%	95 23.8%	2.09	0.62	7

It is inferred from the table 5.48 that the Textbooks (79.3%) are the most used information sources by the respondents followed by News paper/magazine (68%). Reference sources (58.8%) like Dictionaries, Encyclopaedias and etc., are positioned in the third rank followed by General books (54.5%), Journals (52.3%) and majority of the respondents used e-resources (59.3%) sometimes. Thesis, reports and dissertation (14.8%) are the least used information sources by the respondents. **Simisaye** (2012) found similar results that users always consulted library textbooks.

It is concluded from the table 5.48 that the syllabus oriented studies, textbooks are the major information sources used by the academic library users followed by

newspaper/magazine. May be because of the lack of research aptitude and lack of facilities e-resources and thesis, reports and dissertations are the least used information sources.

5.2.4.1 Cluster Analysis of Usefulness of Information Sources

Clustering involves grouping of data into classes or cluster so that object within the same cluster is relatively similar whereas objects in different clusters are relatively dissimilar. It is a useful technique for the discovery of data distribution and patterns in the underlying data. Cluster Analysis is used for usefulness of information sources by the respondents

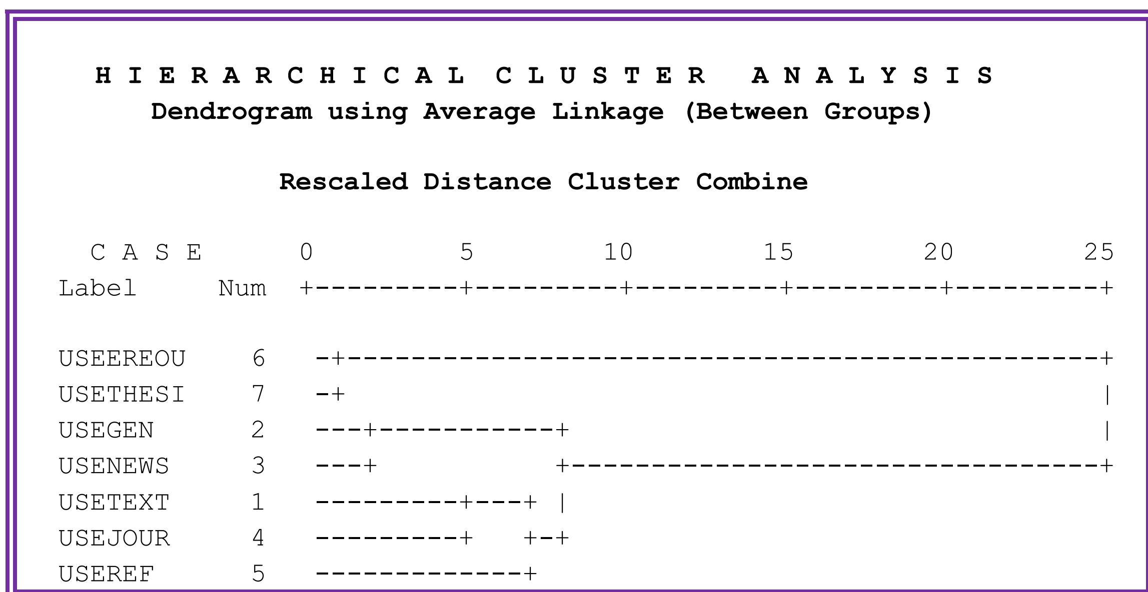


Figure 5.7 Cluster analysis of Usefulness of information sources

It is found from Dendrogram that three clusters have been formed at 30% level. Cluster one consists of three variables such as "*Textbooks*", "*Journals*" and "*Reference source*", it can be named as "**Basic sources**". Cluster two consists of two variables such as General books Newspapers / Magazines and it can be named as "**Current information sources**" and Cluster three consists of two variables such as "e- resources" and "Thesis, Reports and Dissertation", it can be named as "**Additional sources**".

5.2.4. 2 Proximity matrix for Usefulness of Information Sources

The proximity matrix test has been administrated among the variables to identify the one-to-one relation between the variables and the same is shown in table 5.49.

Table 5.49

Proximity matrix for Usefulness of Information Sources

S. No.	Description	Text books	General books	News papers	Journals	Reference sources	E resources	Thesis
1	Text books	.000						
2	General books	281	.000					
3	Newspapers	266	**235**	.000				
4	Journals	256	**253**	*282*	.000			
5	Reference sources	**269**	*298*	271	271	.000		
6	E resources	*395*	292	349	**273**	286	.000	
7	Thesis	*532*	411	464	410	407	**227**	.000

From the Table 5.49, it can be seen that the following pairs are closely associated.

- Usefulness of Newspapers and General books
- Usefulness of Journals and General books
- Usefulness of Reference sources and Text books
- Usefulness of E resources and Journals
- Usefulness of E resources and Thesis

From the Table 5.49, it can be seen that the following pairs are not closely associated.

- Usefulness of Journals and Newspapers
- Usefulness of E resources and Text books
- Usefulness of Thesis and Text books

5.2.4.3 Usefulness of Information Sources Vs Gender

The study is extended to gender. The mean and standard deviation are calculated and the ranks are assigned. The same is shown in Table 5.50 and A2.1

Table 5.50

Usefulness of Information Sources Vs Gender

S. No.	Description	Male n = 151			Female n= 249		
		Mean	SD	Rank	Mean	SD	Rank
1	Textbooks	1.21	0.44	1	1.23	0.47	1
2	General books	1.49	0.65	3	1.56	0.63	5
3	Newspapers / Magazines	1.40	0.66	2	1.42	0.64	2
4	Journals	1.53	0.59	4	1.55	0.63	4
5	Reference sources	1.54	0.66	5	1.45	0.60	3
6	e- resources	1.89	0.62	6	1.86	0.63	6
7	Thesis, Reports and Dissertation	2.13	0.57	7	2.07	0.64	7

It is inferred from the table 5.50 and A 2.1 that majority of male (80.1%) and female (78.7%) respondents used textbooks and ranked first followed by Newspaper/magazine ((Male70.2%) (Female 66.7%)). Male respondents ranked General books (59.6%) as the third, whereas female respondents ranked Reference sources (61%) as the third ranked information resource. Both male (51.7%) and female (52.6%) respondents ranked Journal as the fourth rank. Male respondents give the fifth rank to Reference source and female respondents ranked General books as fifth. Both male (25.2% and 10.6% respectively) and female (27.7% and 17.3% respectively) respondents were ranked in the sixth and seventh rank as e-resources and thesis, reports and dissertation respectively are used in the sixth and seventh rank.

In brief, Textbooks and Newspaper/magazines are ranked first and second as the most useful information sources by both the male and female respondents. Similarly e-resources and Thesis, reports and dissertation are the least used information sources by both male and female respondents and they are ranked as the sixth and seventh respectively.

5.2.4.4 Usefulness of Information Sources Vs Discipline

The study is further extended to discipline. The mean and standard deviation are calculated based on mean and standard deviation and the ranks are assigned. The same is shown in Table 5.51 and A2.2.

Table 5.51

Usefulness of Information Sources Vs Discipline

S. No.	Description	Arts n= 167			Science n= 233			Chi square
		Mean	SD	Rank	Mean	SD	Rank	
1	Textbooks	1.24	0.47	1	1.21	0.45	1	0.354
2	General books	1.59	0.62	5	1.49	0.64	4	6.300
3	Newspapers / Magazines	1.47	0.67	2	1.36	0.63	2	3.492
4	Journals	1.57	0.62	4	1.52	0.61	5	1.142
5	Reference sources	1.53	0.64	3	1.45	0.61	3	1.598
6	e- resources	1.87	0.60	6	1.87	0.64	6	1.133
7	Thesis, Reports and Dissertation	2.08	0.62	7	2.09	0.62	7	0.030
		Mean chi square (∑ chi square/ n)						2.007

As seen from the above table 5.51 and A2.2 that majority of science discipline respondents always used Textbooks (80.3%), General books (59.2%), Newspapers / Magazines (71.7%), Journals (54.5%) and Reference sources (61.4%) more than the arts discipline (77.8%, 47.9%, 62.9%, 49.1%, 55.1% respectively) respondents and e- resources and Thesis, Reports, and Dissertation are sometimes used by arts (62.3%, 61.7% respectively) and science (57.1%, 61.4% respectively) discipline respondents.

Chi-Square test was administered to find out the significant difference based on the discipline and information sources used for their need. The calculated value 6.300 is greater than the table value of 5.99147. There is no significant difference based on the discipline and information sources used for their need. Hence, the hypothesis is not proved.

5.2.5 SATISFACTION LEVEL OF INFORMATION RESOURCES

The study analyzed the satisfaction of information resources among the library users. Ten sources are identified and ascertained on the five point scale such as *"Highly Satisfied", "Satisfied", "Neutral", "Dissatisfied" and "Highly dissatisfied".* The weightage is assigned from the least to the highest. The mean and standard deviation are calculated, ranks are assigned based on the mean and the same is shown in Table 5.52.

Table 5.52

Satisfaction level of Information Resources

S. No.	Description	Highly Satisfied	Satisfied	Neutral	Dis satisfied	Highly dissatisfied	Mean	SD	R
1	Adequacy of information sources	113 28.3%	215 53.8%	27 6.8%	43 10.8%	2 0.5%	2.02	0.91	4
2	Collection quality	79 19.8%	245 61.3%	38 9.5%	35 8.8%	3 0.8%	2.10	0.84	7
3	Classification of sources	72 18%	247 61.8%	43 10.8%	36 9%	2 0.5%	2.12	0.82	8
4	Cataloguing of sources	56 14%	226 56.5%	59 14.8%	57 14.3%	2 0.5%	2.31	0.90	10
5	Arrangement of information sources	83 20.8%	249 62.3%	27 6.8%	40 10%	1.0 0.3%	2.07	0.83	5
6	Infrastructure facility	91 22.8%	235 58.8%	31 7.8%	41 10.3%	2 0.5%	2.07	0.87	6
7	Maintenance of library	121 30.3%	217 54.3%	28 7%	34 8.5%	0 0%	1.94	0.84	3
8	Working hours	66 16.5%	253 63.3%	43 10.8%	36 9%	2.0 0.5%	2.14	0.81	9
9	Service quality	99 24.8%	251 62.8%	24 6%	26 6.5%	0 0%	1.94	0.75	2
10	Staff attitude	107 26.8%	253 63.3%	20 5%	18 4.5%	2.0 0.5%	1.89	0.73	1

(R = Rank)

It can be seen from the table 5.52 that 90.1 (including Highly satisfied and satisfied) percent of respondents satisfied Staff attitude, 87.6 percent of respondents satisfied Quality of services provided by the libraries, followed by Maintenance of library (84.6%), Adequacy of information sources (82.1%). It is further inferred that 14.8 percent of respondents are dissatisfied with Cataloguing of sources. 9.5 percent of respondents are dissatisfied with library working hours and Classification of sources.

Majority of the respondents are highly satisfied with Staff attitude to satisfy various sources and facilities. It is followed by Service quality, Maintenance of library and Adequacy of information sources.

5.2.5.1 Satisfaction level of Information Resources Vs Gender

The study is further extended to gender. The mean and standard deviation are calculated based on mean and standard deviation and the ranks are assigned. The same is shown in Table 5.53 and A3.1.

Table 5.53

Satisfaction level of Information Resources Vs Gender

S. No.	Description	Male n = 151			Female n= 249		
		Mean	SD	Rank	Mean	SD	Rank
1	Adequacy of information sources	2.11	0.98	7	1.96	0.86	4
2	Collection quality	2.17	0.90	9	2.05	0.80	6
3	Classification of sources	2.12	0.80	8	2.12	0.84	8
4	Cataloguing of sources	2.34	0.90	10	2.29	0.90	10
5	Arrangement of information sources	2.11	0.93	6	2.04	0.77	5
6	Infrastructure facility	2.11	0.88	5	2.05	0.87	7
7	Maintenance of library	1.99	0.87	3	1.91	0.83	2
8	Working hours	2.06	0.72	4	2.18	0.86	9
9	Service quality	1.93	0.78	2	1.95	0.73	3
10	Staff attitude	1.89	0.77	1	1.88	0.71	1

Table 5.53 and A3.1 shows that Adequacy of information sources (85.5%), Collection quality (83.2%), Arrangement of information sources (84.4%) and Maintenance of library (86.3%) are satisfied by female respondents in the highest rank rather than the male (76.2%, 87.4%, 80.8%, 81.4% respectively) respondents. Infrastructure facility (80.8%), Working hours (85.4%) and Service quality (88.8%) are satisfied by male respondents in the highest rank rather than the female respondents (81.9%, 86.3%, and 86.8% respectively). Staff attitude (first rank), Classification of information sources (eighth rank), Cataloguing of information sources (tenth rank) are satisfied by male (88.1%, 79.5% and 67.5% respectively) and female (88.1%, 79.9% and 67.5% respectively) respondents in equal rank.

Staff attitude is highly satisfied by majority of the male respondents which is followed by Quality of service, maintenance of library. Staff attitude is also highly satisfied by majority of the female respondents which is followed by Maintenance of library and Quality of service. Cataloguing of sources is the least satisfied source among the male and female respondents.

5.2.5 .2 Satisfaction level of Information Resources Vs Types of institution

The study is ascertained by types of institution. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is presented in Table 5.54 and A3.2.

Table 5.54

Satisfaction level of Information Resources Vs Types of institution

S. No.	Description	Government n= 100			Government Aided n= 100			Self finance n= 200		
		M	SD	R	M	SD	R	M	SD	R
1	Adequacy of information sources	2.17	0.97	6	1.92	0.90	5	1.98	0.88	4
2	Collection quality	2.35	0.90	9	1.85	0.73	2	2.06	0.82	6
3	Classification of sources	2.20	0.85	7	1.97	0.64	6	2.14	0.86	8
4	Cataloguing of sources	2.51	0.95	10	2.11	0.85	8	2.28	0.88	10
5	Arrangement of information sources	2.11	0.80	5	2.23	0.89	10	2.00	0.82	5
6	Infrastructure facility	2.23	1.05	8	1.85	0.80	3	2.07	0.79	7
7	Maintenance of library	2.1	0.94	3	1.77	0.82	1	1.92	0.80	3
8	Working hours	2.11	0.75	4	2.12	0.90	9	2.16	0.81	9
9	Service quality	2.05	0.90	2	2.01	0.76	7	1.87	0.67	2
10	Staff attitude	1.95	0.80	1	1.91	0.72	4	1.85	0.70	1

(M = Mean; R = Rank)

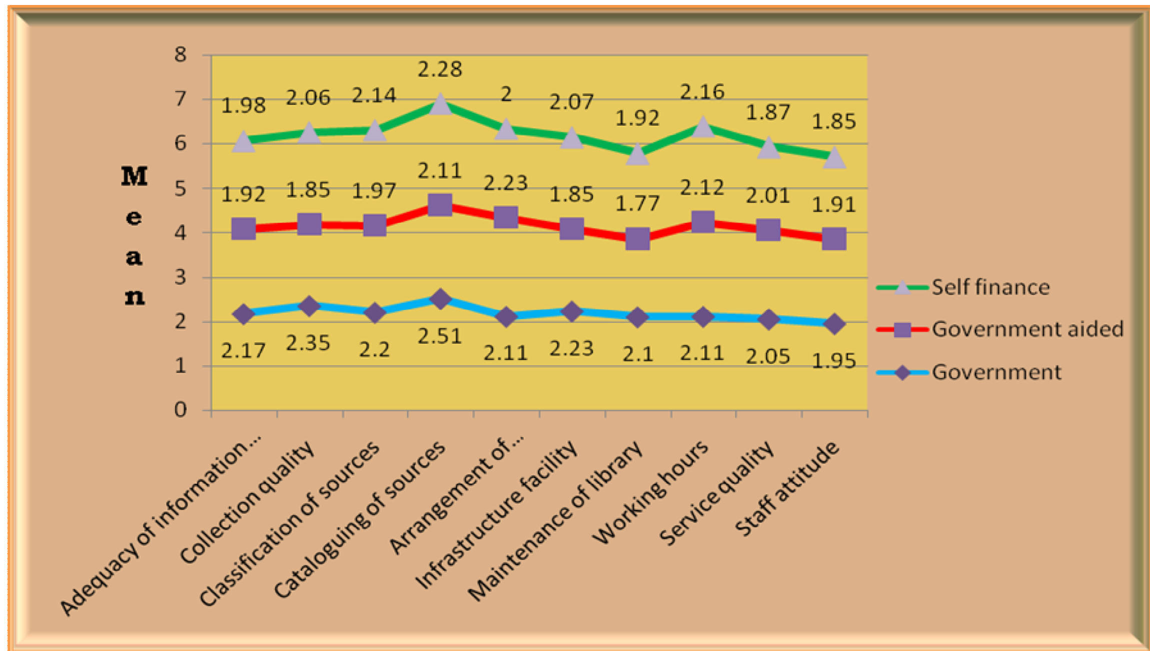


Figure 5.8 Satisfaction level of Information Resources Vs Types of institution

It is inferred from table 5.54, fig. 5.8 and A3.2 that Self finance college (84%) respondents are satisfied with adequacy of information sources in the fourth rank whereas Government aided (83%) college respondents satisfied in the fifth rank and Government college (77%) respondents satisfied in the sixth rank. Collection quality satisfied Government aided (88%) college respondents in the second rank whereas Self finance college (82%) respondents are satisfied in the sixth rank and Government college (72%) respondents satisfied in the ninth rank. Classification of sources satisfied by Government aided college (82%) respondents in the sixth rank whereas Government college (78%) respondents are satisfied in the seventh rank and Self finance college (79.5%) respondents satisfied in the eighth rank. Arrangement of information sources satisfied by Government (79%) and Self finance college (87%) respondents satisfied in the fifth rank whereas Government aided college (79%) respondents in the tenth rank. Regarding Infrastructure facility, Government aided (85%) college respondents satisfied in the third rank whereas Self finance college

(83%) respondents satisfied in the seventh rank and Government college (75%) respondents satisfied in the eighth rank. Government aided (84%) college respondents are satisfied with maintenance of library in the first rank whereas Government (77%) and Self finance college (88.5%) respondents are satisfied in the third rank. Working hours are satisfied by Government (80%) college respondents in the fourth rank whereas Self finance college (80.5%) and Government aided (78%) college respondents remain satisfied in the ninth rank. Service quality is satisfied Government (77%) and Self finance college (95%) respondents in the second rank whereas Government aided (83%) college respondents are satisfied in the seventh rank. Majority of the Government (86%) and Self finance (92.5%) college respondents are satisfied with Staff attitude in the first rank and Government aided (89%) college respondents remain satisfied in the fourth rank.

As observed from the table 5.54, fig. 5.8 and A3.2 that majority of the Government and Self finance college respondents are satisfied with the Staff attitude but Government aided college respondents are satisfied with the Maintenance of library. Cataloguing of sources are the least satisfied among Government and Self finance college respondents whereas Arrangement of information sources are the least source among Government aided college respondents.

5.2.5.3 Satisfaction level of Information Resources Vs Nativity

The study is extended to Nativity. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is given in Table 5.55 and A3.3.

Table 5.55

Satisfaction level of Information Resources Vs Nativity

S. No.	Description	Rural n = 191			Semi urban n = 144			Urban n = 65		
		M	SD	R	M	SD	R	M	SD	R
1	Adequacy of information sources	2.03	0.95	4	2.00	0.91	4	2.02	0.80	6
2	Collection quality	2.16	0.92	8	2.03	0.73	5	2.06	0.81	8
3	Classification of sources	2.19	0.87	9	2.08	0.79	7	2.02	0.74	5
4	Cataloguing of sources	2.28	0.89	10	2.4	0.99	10	2.17	0.70	10
5	Arrangement of information sources	2.08	0.87	5	2.08	0.82	8	2.00	0.77	4
6	Infrastructure facility	2.09	0.90	6	2.06	0.82	6	2.03	0.92	7
7	Maintenance of library	1.91	0.76	2	1.97	0.89	2	1.95	0.98	3
8	Working hours	2.13	0.82	7	2.16	0.83	9	2.12	0.78	9
9	Service quality	1.97	0.73	3	2.00	0.78	3	1.72	0.72	1
10	Staff attitude	1.86	0.70	1	1.94	0.74	1	1.86	0.79	2

(M = Mean; R = Rank)

It is found from table 5.55 and A3.3 that Adequacy of information sources are satisfied by rural (82.2%) and semi urban (82.7%) college respondents in the fourth rank whereas urban (80%) college respondents are in the sixth rank. Collection quality satisfied semi urban (86.2%) college respondents in the fifth rank whereas rural (77.5%) and urban (80%) college respondents are in the eighth rank. Classification of sources satisfied urban (81.5%) college respondents in the fifth rank whereas semi

urban (82.7%) college respondents are satisfied in the seventh rank and rural (11.5%) college respondents are dissatisfied in the ninth rank. Majority of the rural, semi urban and urban college respondents are not satisfied with Cataloguing of sources. Infrastructure facilities satisfied rural (57.1%) and semi urban (63.2%) college respondents in the sixth rank whereas urban (53.8%) college respondents are in the seventh rank. Maintenance of library are satisfied by rural (85.9%) and semi urban (83.4%) college respondents in the second rank whereas urban (83.1%) college respondents in the third rank. Semi urban (11.1%) and urban (7.7%) college respondents are not satisfied with (ninth rank) Library working hours and rural college respondents are satisfied in the seventh rank. Service quality highly satisfied urban (87.7%) college respondents whereas rural (87.5%) and semi urban (87.5%) college respondents are satisfied in the third rank. Staff attitude is satisfied by rural (90.1%) and semi urban (91%) college respondents in the first rank whereas urban (87.7%) college respondents in the second rank.

It can be seen from the table 5.55 and A3.3 that majority of the rural and semi urban college respondents are satisfied with Staff attitude followed by Maintenance of library, Service quality and Adequacy of information sources whereas urban college respondents rest satisfied with Service quality, Staff attitude followed by Maintenance of library. Majority of the rural, semi urban and urban college respondents are not satisfied with Cataloguing of sources.

5.2.5 .4 Satisfaction level of Information Resources Vs Discipline

The study is also ascertained by discipline. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is given in Table 5.56 and A3.4.

Table 5.56

Satisfaction level of Information Resources Vs Discipline

S. No.	Description	Arts n= 167			Science n= 233			Chi square
		Mean	SD	Rank	Mean	SD	Rank	
1	Adequacy of information sources	1.99	0.93	4	2.03	0.89	5	4.982
2	Collection quality	2.02	0.82	5	2.15	0.85	7	5.801
3	Classification of sources	2.04	0.79	6	2.18	0.84	9	5.524
4	Cataloguing of sources	2.30	0.95	10	2.31	0.87	10	6.952
5	Arrangement of information sources	2.12	0.81	9	2.03	0.85	4	4.622
6	Infrastructure facility	2.05	0.90	7	2.09	0.85	6	3.401
7	Maintenance of library	1.92	0.84	3	1.95	0.85	2	0.502
8	Working hours	2.11	0.86	8	2.16	0.77	8	7.524
9	Service quality	1.87	0.75	1	1.99	0.75	3	3.536
10	Staff attitude	1.87	0.75	1	1.90	0.72	1	5.115

It is observed from the table 5.56 and A3.4 that Adequacy of information sources (83.8%), Collection quality (83.3%), Classification of information sources (81.5%) and Service quality (88.6%) are satisfied by arts discipline respondents in the highest rank when compared to science discipline (80.6%, 79.4%, 78.6% and 86.7% respectively) respondents. Arrangement of information sources (83.2%), Infrastructure facility (82.4%) and Maintenance of library (83.7%) are satisfied by science (82.7%, 80.2% and 85.6% respectively) discipline respondents in the highest rank when compared to arts discipline respondents.

It is inferred from the table 5.56 and A3.4 that Service quality and Staff attitude are highly satisfied among arts discipline respondents whereas Service quality satisfied the science discipline respondents highly. Cataloguing of resources gives the least level satisfaction to the arts and science discipline respondents.

Chi-square test was used to test the significant difference in satisfaction of library resources and facilities among the various disciplines. The calculated value of 7.524 is less than the table value of 9.48773 for degrees of freedom four at .05 significance level. Therefore, it is inferred that there is a significant difference in satisfaction of library resources and facilities among the various disciplines. Hence, the hypothesis is proved.

5.2.6 ORDER OF PREFERENCES (IMPORTANCE) IN VARIOUS RESOURCES AND SUPPORTING SERVICES AMONG THE USERS

The study analyzed the order of preferences (importance) in various resources and supporting services among the users on five point scale such as "*Highly preferred*", "*Preferred*", "*Neutral*", "*Not preferred*" and "*Highly not preferred*". The data were grouped into twelve categories and under three groups such as "Information sources", "Facilities" and "Human resources". The weightage is assigned from the least to the highest and the same is shown in table 5.57.

Table 5.57
Order of Preferences given to the Library Resources among Users

S. No.	Description	Highly preferred	Preferred	Neutral	Not preferred	Highly not preferred	Mean	SD	Rank
A. Information sources									
1	Right selection of information sources	97 24.3%	252 63%	34 8.5%	17 4.3%	0 0%	1.93	0.70	2
2	Relevancy of sources	92 23%	246 61.5%	23 5.8%	39 9.8%	0 0%	2.02	0.82	5
3	Print sources	82 20.5%	248 62%	36 9%	32 8%	2 0.5%	2.06	0.81	7
4	Electronic sources	28 7%	162 40.5%	85 21.3%	121 30.3%	4 1%	2.78	0.99	12
5	Fast access of information sources	74 18.5%	240 60%	37 9.3%	49 12.3%	0 0%	2.15	0.86	11
B. Facilities									
6	Technical assistance	71 17.8%	246 61.5%	44 11%	37 9.3%	2 0.5%	2.13	0.83	10
7	Library hours	70 17.5%	255 63.8%	37 9.3%	38 9.5%	0 0%	2.11	0.80	9
8	Convenience of library system	75 18.8%	257 64.3%	31 7.8%	36 9%	1 0.3	2.08	0.80	8
9	Overall performance	93 23.3%	261 65.3%	14 3.5%	32 8%	0 0%	1.96	0.77	4
10	Solving of academic problems	74 18.5%	267 66.8%	31 7.8%	28 7%	0 0%	2.03	0.74	6
C. Human resources									
11	Library staff Co-operation	119 29.8%	246 61.5%	15 3.8%	20 5%	0 0%	1.84	0.72	1
12	Motivational factor	107 26.8%	244 61%	17 4.3%	32 8%	0 0%	1.94	0.79	3

It is noted that 87.3 percent (including highly preferred and preferred) of the respondents prefer to right selection of information sources, 84.5 percent of respondents prefer to available source in a library related to their academic needs and 82.5 percent of the respondents prefer to print resources. 47.5 percent of the respondents give preference to e- resources and 78.5 percent of the respondents agree to prefer Fast access of information sources in the libraries. In available facilities, five categories were identified and the highest preference is given by the respondents to overall performance of the library (88.6%) followed by Solving of academic problems (85.3), Convenience of library system (83.1%), Library hours (81.3%) and Technical assistance (79.3%). In human resources, 91.3 percent of the respondents prefer Co-operation of library staff in using library and 87.8 percent of the respondents prefer motivations by library professionals.

It is inferred from table 5.57 that user respondents give preference to library staff co- operation followed by Right selection of information sources, Motivational factor, Relevancy of sources to academic and Solving of academic problems. Users give the least preference to e-resources, Fast access of information sources and Technical assistance.

5.2.6.1 Order of Preferences given to the Library Resources among Users Vs Gender

The study is ascertained by gender. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is shown in Table 5.58 and A 4.1.

Table 5.58

Order of Preferences given to the Library Resources among Users Vs Gender

S. No.	Description	Male n = 151			Female n= 249		
		Mean	SD	Rank	Mean	SD	Rank
A. Information sources							
1	Right selection of information sources	1.94	0.74	3	1.92	0.68	3
2	Relevancy of sources	1.90	0.77	2	2.10	0.85	8
3	Print resources	2.03	0.82	9	2.08	0.80	7
4	Electronic resources	2.77	0.97	12	2.78	1.01	12
5	Fast access of information sources	2.10	0.88	10	2.18	0.86	11
B. Facilities							
6	Technical assistance	2.08	0.87	8	2.16	0.80	9
7	Library hours	2.03	0.74	6	2.16	0.83	10
8	Convenience of library system	2.11	0.81	11	2.06	0.80	6
9	Overall performance	1.97	0.82	4	1.96	0.73	4
10	Solving of academic problems	2.07	0.73	8	2.01	0.74	5
C. Human resources							
11	Library staff Co-operation	1.89	0.78	1	1.81	0.67	1
12	Motivational factor	1.98	0.84	5	1.91	0.76	2

It is inferred from the table 5.58 and A 4.1 that nearly equal percent of male (87.4) and female (87.2%) user respondents prefer right selection of information sources. Relevancy of sources is ranked second by male (88.1%) respondents whereas female (82.4%) respondents preferred to be in the eighth rank. An electronic resource is the least preference among male (47%) and female (46.6%) librarians. It further reveals that fast access of information sources are preferred by male librarians (78.8%) in the tenth rank and female librarians (78.3%) preferred the eleventh rank. Technical assistance given by the library is preferred by male librarians (83.5%) in eighth rank whereas female librarians (76.7%) are ranked ninth. Male (86%) respondents have given preference to Library hours in the sixth rank whereas female (78.3%) respondents give importance to the tenth rank. It is inferred from the table that Convenience of library system is preferred among the male respondents (80.2%) in the eleventh rank whereas female respondents (84.8%) preferred the sixth rank. Both male (88.1%) and female (88.8%) respondents give equal importance (4^{th} rank) to Overall performance of library activities. It is seen from table that male (85.4%) respondents prefer to use library for Solving academic problems in the eighth rank whereas female (85.2%) respondents prefer the fifth rank. Both male (88%) and female (93.2%) respondents prefer Co-operation of library staff in the first rank, Motivational factors are preferred by the male (86.7%) respondents in the fifth rank whereas female (88.3%) respondents gave the second rank.

It is found from the table 5.58 and A 4.1 that male user respondents preferred Library staff co- operation highly followed by Relevancy of sources, Right selection of information sources, Overall performance, Motivational factor and Convenience of library hours but Electronic resources is the least preference among the male respondents. In case of female user respondents, Library staff co- operation is the highly preferred choice followed by Motivational factor, Right selection of information sources, Overall performance of library, Solving of academic problems, Convenience of library system and Electronic resources has the least preference.

5.2.6.2 Order of Preferences given to the Library Resources among Users Vs Types of institution

The study is extended to types of institution. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is presented in Table 5.59 and A4.2.

Table 5.59

Order of Preferences given to the Library Resources among Users Vs Types of institution

S. No.	Description	Government n= 100			Government Aided n= 100			Self finance n= 200		
		Mean	SD	R	Mean	SD	R	Mean	SD	R
A. Information sources										
1	Right selection of information sources	2.04	0.65	4	2.01	0.76	5	1.83	0.69	1
2	Relevancy of sources	2.10	0.89	7	1.87	0.79	1	2.06	0.80	9
3	Print sources	2.01	0.69	3	2.35	0.93	11	1.94	0.77	5
4	Electronic resources	2.68	1.07	12	2.64	1.01	12	2.90	0.93	12
5	Fast access of information sources	2.22	0.81	10	2.20	1.02	9	2.10	0.81	11
B. Facilities										
6	Technical assistance	2.18	0.81	9	2.25	0.85	10	2.05	0.83	7
7	Library hours	2.14	0.79	8	2.11	0.89	7	2.09	0.76	10
8	Convenience of library system	2.28	0.89	11	2.10	0.78	6	1.97	0.75	6
9	Overall performance	2.04	0.76	5	1.97	0.87	4	1.92	0.71	4
10	Solving of academic problems	2.06	0.69	6	1.95	0.72	3	2.06	0.77	8
C. Human resources										
11	Co-operation of library staff	1.79	0.73	1	1.89	0.71	2	1.84	0.71	2
12	Motivational factor	1.92	0.80	2	2.15	0.90	8	1.84	0.71	2

(R = Rank)

It is evident from the table 5.59 and A4.2 that Right selection of information sources is preferred by Self finance college (91.5%) users in the first rank whereas Government college (81%) users preferred the fourth rank and Government aided (85%) college library users preferred the fifth rank. Relevancy of information sources is preferred by Government aided college (89%) library users in the first rank whereas Government college (81%) library users in the seventh rank and the ninth rank by Self finance college (84%) library users. Print sources was preferred by Government college (84%) library users in the third rank whereas Self finance college (88.5%) library users preferred the fifth rank and Government aided college (69%) library users preferred the eleventh rank. Electronic resources was preferred in the least (12^{th} rank) among Government (55%), Government aided (55%), Self finance college (40%) library users. Fast access of information sources was preferred by Government aided college (77%) library users in the tenth rank whereas the Government college (78%) library users were in the tenth rank and Self finance college (79.5 %) library users are in the eleventh rank. Technical assistance is preferred among Self finance (82%) college library users in the seventh rank whereas Government (76%) library users are in the ninth rank and Government aided college (77%) library users are in the tenth rank. Government aided college (81%) library users give importance to library hours in the seventh rank whereas Government college (79%) library users are in the eighth rank and Self finance college (82.5%) library users are in the tenth rank. Convenience of library system is preferred by Government aided (86%) and Self finance college (87%) library users in the sixth rank whereas Government college (72%) library users are in the eleventh rank. Overall performance is preferred by Government aided (88%) and Self finance college (90.5%) library users in the fourth rank whereas Government college (85%) library users are in the fifth rank. Government aided college (91%)

library users give preference to library for solving academic problems and are in the third rank whereas Government college (83%) library users are in the sixth rank and Self finance college (83.5%) library users are in the eighth rank. Co-operation of library staff was preferred by Government (92%) library users in the first rank whereas Government aided college (90%) and Self finance college (91.5%) library users preferred to be in the second rank. Motivational factor was preferred by Government (86%) and Self finance college (83%) library users were in the second rank whereas Government aided college (79 %) library users preferred to be in the eighth rank.

It is evident from the table 5.59 and A4.2 that Government college library respondents highly preferred Co-operation of library staff followed by Motivational factor, Print sources, Right selection of information sources whereas Government aided user respondents give high priority to Relevancy of information sources followed by library that helps to solve academic problems and Overall performance of library activities. Self finance college respondents give priority to right selection of information sources followed by Co-operation of library staff and motivational factor and Electronic resources is the least preferred by Government, Government Aided and Self finance college users.

5.2.6.3 Order of Preferences given to the Library Resources among Users vs Nativity

The study further is ascertained by nativity of the respondents. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is presented in Table 5.60 and A 4.3.

Table 5.60

Order of Preferences given to the Library Resources among Users Vs Nativity

S. No.	Description	Rural n = 191			Semi urban n = 144			Urban n = 65			Chi square
		Mean	SD	R	Mean	SD	R	Mean	SD	R	
A. Information sources											
1	Right selection of information sources	1.90	0.72	2	1.90	0.67	1	2.06	0.73	7	7.002
2	Relevancy of Information Sources	2.06	0.89	7	2.04	0.75	7	1.88	0.78	2	8.421
3	Print resources	2.01	0.83	4	2.15	0.78	10	2.02	0.84	6	27.971
4	Electronic resources	2.81	1.02	12	2.82	0.99	12	2.60	0.92	12	5.301
5	Fast access	2.16	0.85	11	2.23	0.91	11	1.95	0.78	4	6.548
B. Facilities											
6	Technical assistance	2.12	0.83	10	2.10	0.81	8	2.23	0.86	11	10.200
7	Library hours	2.09	0.81	9	2.12	0.78	9	2.14	0.83	9	3.011
8	Convenience of library system	2.07	0.82	8	2.03	0.78	6	2.20	0.80	10	10.107
9	Overall performance	2.03	0.80	6	1.92	0.71	2	1.86	0.79	1	5.250
10	Solving of academic problems	2.02	0.76	5	2.03	0.68	5	2.08	0.80	8	4.903
C. Human resources											
11	Co-operation of library staff	1.76	0.66	1	1.92	0.76	3	1.89	0.75	3	4.319
12	Motivational factor	1.94	0.81	3	1.92	0.79	4	1.97	0.75	5	3.318

(R = Rank)

It is inferred from the table 5.60 and A 4.3 that Right selection of information sources has been given preference in the first rank by semi urban located college (90.3%) respondents whereas rural located college (87.4%) respondents are in the second rank and urban located college (80%) respondents in the seventh rank. Relevancy of information sources has been given preference in the second rank by urban college (87.7%) respondents whereas rural (82.7%) and semi urban college (85.5%) user respondents have given in the seventh rank. Print resources were preferred in the fourth rank by rural college (84.9%) respondents whereas urban college (73.8%) respondents in the sixth rank and semi urban college (83.3%) respondents in the tenth rank. Electronic resources were preferred among rural (55%), semi urban (56%) and urban (41.4%) college library user respondents in the twelfth rank. It further reveals that Fast access of information sources was preferred by rural (79.6%) and semi urban (77%) college respondents in the eleventh rank whereas urban college (84.7%) respondents preferred the fourth rank. Technical assistance was preferred by semi urban college respondents the eighth rank (82.7%) whereas rural (79.5%) college respondents are in the tenth rank and urban (70.7%) college respondents are in the eleventh rank. Library hours were preferred among rural (82.7%), semi urban (81.3%), urban (77%) college library user respondents in the ninth rank. Convenience of library system was given importance by semi urban (86.8%) college respondents in the sixth rank whereas rural (82.7%) college library user respondents are in the eighth rank and urban (75.3%) college library user respondents are in the tenth rank. Overall performance has been given preference in the first rank by urban (90.8%) college respondents whereas semi urban (91%) college respondents have also given preference to be in the second rank and rural (85.8%) college respondents are in the sixth rank. Solving academic problems has been given preference in the fifth rank by rural (83.7%) and semi urban

(88.2%) college user respondents whereas urban (83.1%) college respondents have given preference in the eighth rank. Co-operation of library staff was preferred in the first rank by rural (93.7%) college respondents whereas semi urban (88.9%) and urban (89.2%) college respondents preferred it in the third rank. Motivational factor was preferred in the third rank by rural (87.9%) college respondents whereas semi urban (88.2%) college respondents are in the fourth rank and urban (86.2%) college respondents get the fifth rank.

It is found from the table 5.60 and A 4.3 that Co-operation of library staff has been given higher priority in rural college library respondents whereas right selection of information sources is the highest preference given by semi urban college library respondents. Overall performance is given the highest preference by urban college library respondents and Electronic resources have been given the least preference among rural, semi urban and urban college library user respondents.

Chi-Square test was administered to find out the association between order of preferences in various resources and supporting services among the nativity users. The calculated value of 27.971 is greater than the table value of 15.507 for degrees of freedom four at .05 significance level. It is inferred that there is no association between the order of preferences in various resources and supporting services among the nativity users. Hence, the hypothesis is proved.

5.2.7 DIFFICULTIES IN USING LIBRARY SERVICES

The study ascertained difficulties faced in using library services by the users on a three point scale such as *"Always", "Sometimes"* and *"Never"*. The services are grouped into nine major categories. The mean and standard deviation are calculated and based on that the ranks are given. The weightage is assigned from the least to the highest and the same is shown in Table 5.61.

Table 5.61

Difficulties in Using Library Services

S. No.	Description	Always	Sometimes	Never	Mean	SD	Rank
1	Lending service	64 16%	49 12.3%	287 71.8%	2.56	0.75	9
2	Reference service	72 18%	49 12.3%	279 69.8%	2.52	0.78	8
3	Referral service	71 17.8%	59 14.8%	270 67.5%	2.50	0.78	7
4	Inter library loan	129 32.3%	141 35.3%	130 32.5%	2.00	0.81	2
5	Consortium	76 19%	172 43%	152 38%	2.19	0.73	4
6	Online service	186 46.5%	116 29%	98 24.5%	1.78	0.81	1
7	CAS	114 28.5%	46 11.5%	240 60%	2.32	0.89	5
8	Reprography service	94 23.5%	74 18.5%	232 58%	2.35	0.84	6
9	Cataloguing service	122 30.5%	97 24.3%	181 45.3%	2.15	0.86	3

It is inferred from the table 5.61 that library user respondents always faced problems in using Online service (46.5%) in libraries. Library user respondents always faced problem in the second rank in Inter library loan (32.3%), followed by Cataloguing service (30.5%), Consortium (19%) CAS (28.5%) and Reprography service (23.5%). Further, it is inferred that 71.8 percent of respondents never faced problems in using Lending service, 69.8 percent of respondents never faced problems in using Reference service and 67.5 percent of respondents never faced problems in using Referral service.

It is found from the table 5.61 that using Online service is always a problem among the users followed by Inter library loan, Catalogue, Consortium, and Current Awareness Service. Lending service, Reference service and Referral service are not the major problems among the users.

5.2.7.1 Difficulties in Using Library Services Vs Gender

The study is extended to gender. The mean and standard deviation are calculated and based on the calculation the ranks are assigned. The same is shown in Table 5.62 and A5.1.

Table 5.62

Difficulties in Using Library Services Vs Gender

S. No.	Description	Male n = 151						Female n= 249					
		Always	Some times	Never	M	SD	R	Always	Some times	Never	M	SD	R
1	Lending service	25 16.6%	15 9.9%	105 69.5%	2.57	0.76	9	39 15.7%	34 13.7%	176 70.7%	2.55	0.75	9
2	Reference service	26 17.2%	20 13.2%	98 64.9%	2.52	0.77	8	46 18.5%	29 11.6%	174 69.9%	2.51	0.79	7
3	Referral service	30 19.9%	23 15.2%	111 73.5%	2.45	0.81	7	41 16.5%	36 14.5%	172 69.1%	2.53	0.76	8
4	Inter library loan	54 35.8%	40 26.5%	57 37.7%	2.02	0.86	2	75 30.1%	101 40.6%	73 29.3%	1.99	0.77	2
5	Consortium service	27 17.9%	61 40.4%	63 41.7%	2.24	0.74	4	49 19.7%	111 44.6%	89 35.7%	2.16	0.73	4
6	Online service	75 49.7%	35 23.2%	41 27.2%	1.77	0.85	1	111 44.6%	81 32.5%	57 22.9%	1.78	0.79	1
7	CAS	39 25.8%	15 9.9%	97 64.2%	2.38	0.87	5	75 30.1%	31 12.4%	143 57.4%	2.27	0.90	5
8	Reprography service	34 22.5%	19 12.6%	98 64.9%	2.42	0.84	6	60 24.1%	55 22.1%	134 53.8%	2.30	0.83	6
9	Cataloguing service	42 27.8%	37 24.5%	72 47.7%	2.20	0.85	3	80 32.1%	60 24.1%	109 43.8%	2.12	0.87	3
	Mean				2.29						2.25		

(M= Mean; R =Rank)

Table 5.62 and A5.1 inferred that Lending service (73.5%), CAS (64.2%), Reprography service (64.9%) and Cataloguing service (32.1%) are never more highly faced difficulties among male respondents than the female (70.7%, 57.4%, 53.8% and 27.8% respectively) respondents. Referral service (69.1%) and Reference service (69.9%) are never highly faced difficulties among female respondents rather than the male (64.9% and 69.5% respectively) respondents. Using Inter library loan service (40.6%) and Consortium service (44.6%) are sometimes problems faced more by

female respondents than the male (26.5% and 40.4% respectively) respondents. Online service is always a more highly faced difficulty among male (49.7%) respondents than the female (44.6%) respondents.

Table 5.62 and A5.1 depicted that the opinion on the variables of difficulties in using is almost similar as identified by both male and female. It is proved that there is no significant deviation between gender in facing difficulties related to the use of various library services provided by the libraries.

5.2.7.2 Difficulties in Using Library Services Vs Types of the institution

The study is ascertained by types of institution. The mean and standard deviation are calculated and based on the calculation the ranks are assigned. The same is shown in the Table 5.63 and A5.2.

Table 5.63
Difficulties in Using Library Services Vs Types of the Institution

S. No.	Description	Government n= 100			Government Aided n= 100			Self finance n= 200			Chi square
		Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank	
1	Lending service	2.54	0.78	8	2.57	0.74	8	2.56	0.75	9	0.898
2	Reference service	2.54	0.81	9	2.52	0.76	7	2.51	0.78	8	5.384
3	Referral service	2.44	0.81	6	2.53	0.77	8	2.51	0.77	7	0.984
4	Inter library loan	1.87	0.80	2	2.04	0.82	2	2.05	0.80	2	3.747
5	Consortium service	2.12	0.76	5	2.13	0.72	3	2.26	0.72	4	3.789
6	Online service	1.64	0.72	1	1.87	0.86	1	1.81	0.83	1	9.356
7	CAS	2.19	0.92	4	2.39	0.87	6	2.34	0.88	5	3.488
8	Reprography service	2.46	0.80	7	2.25	0.86	5	2.34	0.84	6	3.554
9	Cataloguing service	2.05	0.82	3	1.99	0.89	4	2.28	0.84	3	8.951

It is evident from the table 5.63 and A5.2 that Lending service does not affect Government (72%), Government aided (72%) and Self Finance (71.5%) College respondents and they occupy the least rank. 74 percent of Government college

respondents never faced problems and occupied the least rank in using Reference service whereas 68 percent of Government aided college respondents never faced problems and 68.5 percent of Self finance college respondents never faced problems. 70 percent of Government aided college respondents never faced any problem and occupied the least rank (eight) in using Referral service whereas 68 percent of Self finance college respondents have not faced any problem and 64 percent of Government college respondents never faced a problem. Regarding Reprography service, 65 percent of Government college respondents never faced a problem whereas 57.5 percent of Self finance college respondents never faced a problem and 52 percent of Government aided college respondents never faced a problem. It is further evident that Inter library loan service is always a problem and occupied the second rank among Government (39%), Government aided (31%) and Self finance (29.5%) college respondents. Government (42%), Government aided (47%) and Self finance (41.5%) college respondents sometimes faced problems in using Consortium service. Online service is always a problem and occupied the first rank among Government (50%), Government aided (44%) and Self finance (46%) college respondents. CAS is never a problem among Government (53%), Government aided (65%) and Self finance (61%) college respondents. Government (31%) and Self finance (25.5%) college respondents faced problem in the third rank for using Cataloguing service whereas Government aided (40%) college respondents faced problems and they are in the fourth rank.

Chi-square test was used to test the significant difference in difficulties encountered by different types of institutional users and for getting the various library services. The calculated value of 9.356 is less than the table value of 9.488 for degrees of freedom four at .05 significance level. Therefore, it is inferred that the significant by difference in difficulties encountered by different types of institutional users and for getting the various library services. Hypothesis is proved.

5.2.7.3 Difficulties in Using Library Services Vs Nativity

The study is further ascertained by nativity of institution. The mean and standard deviation are calculated, and based on the calculation the ranks are assigned. The same is presented in the Table 5.64 and A5.3.

Table 5.64

Difficulties in Using Library Services Vs Nativity

S. No.	Description	Rural n = 191			Semi urban n = 144			Urban n = 65		
		Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank
1	Lending service	2.58	0.76	9	2.55	0.76	9	2.52	0.75	9
2	Reference service	2.51	0.78	7	2.53	0.79	8	2.51	0.77	7
3	Referral service	2.52	0.77	8	2.52	0.78	7	2.38	0.82	6
4	Inter library loan	2.02	0.83	2	2.06	0.83	2	1.83	0.65	2
5	Consortium	2.18	0.75	4	2.25	0.73	3	2.09	0.68	3
6	Online service	1.79	0.83	1	1.78	0.83	1	1.74	0.76	1
7	CAS	2.32	0.87	5	2.38	0.90	6	2.15	0.91	4
8	Reprography service	2.36	0.83	6	2.26	0.86	4	2.51	0.77	8
9	Cataloguing service	2.04	0.87	3	2.27	0.85	5	2.20	0.81	5

It is found from the table 5.64 and A5.3 that Lending service is an easily utilized service among rural (never = 73.8%), semi urban (never = 70.8%) and urban (never = 67.7%) college respondents. 71.5 percent of semi urban college respondents never faced a problem in using Reference service whereas 69.1 percent of rural college respondents never faced a problem and 67.7 percent of urban college respondents never faced problems. Regarding Referral service, 69.4 percent of semi urban college respondents never faced problems rather than rural (68.6%) and urban (60%) college respondents. Most of the rural (33%), semi urban (31.9%) and urban (30.8%) college respondents always faced problems in using Inter library loan service and it occupies the second rank. The opinion of Consortium service is that it is used with difficulty by the third rank among semi urban (17.4%) and urban (18.5%) college respondents whereas rural (20.4%) college respondents are in the fourth rank. It is further found that Online service is always difficult among rural (46.6%), semi urban (47.2%) and urban (44.6%) college respondents and occupied the first rank. Rural (58.6%), semi urban (66.7%) and urban (49.2%) college respondents never faced difficulties in using Current Awareness Service. 67.7 percent of semi urban college respondents never faced difficulties in using Reprography service whereas 58.6 percent of rural college respondents never faced difficulties and 52.8 percent of urban college respondents never faced difficulties. 53.5 percent of semi urban college respondents never faced difficulties in using Cataloguing service whereas 44.6 percent of urban college respondents never faced difficulties and 39.3% percent of rural college respondents never faced difficulties.

It is found from the table 5.64 and A5.3 that rural college respondents highly faced problems in using Online service, Inter library loan, Cataloguing service whereas semi urban and urban college respondents faced problems in using Online service, Inter library loan, Consortium. Referral service and Reference service are convenient services among rural college respondents whereas Lending service, Reference service and Referral service are the convenient services among semi urban college respondents. Lending service, Reprography service and Reference service are the convenient services among urban college respondents.

5.3 EVALUATIVE STUDY

Nitecki (2004) has suggested that a minimal approach to conduct a library program evaluation is to prove that the program exists. They are

(C: Client Satisfaction) High service Low operations	**(D: Positive Outcomes)** High service High operations
(A: Program Evidence) Low service Low operations	**(B: Efficient Operations)** Low service High operations

The researcher has evaluated the Information Resource Management programmes in Arts and Science College libraries affiliated to Bharathidasan University based on the above evaluation method.

Quadrant A: Programme evidence

Author stated that the evaluation can be completed with minimal attention (or improvements in operations) to the programmes (services) offered by the libraries.

Result: Majority of the institutions initiate various library programmes (services) based on the instruction given by the University Grants Commission and NAAC. Due to insufficient funds such programmes are functioning for documentary evidence. In this research , the same results were obtained based on the study which means that Online service, Inter Library Loan service, Cataloguing service and Consortium service are not provided effectively by Arts and Science College libraries affiliated to Bharathidasan University libraries. (Table 5.22).

It is inferred that some of the library services are provided by the libraries as a programme evidence and such library programmes are done /accomplished with low operations.

Quadrant B: Efficient Operations

Author stated that the evaluation can be completed to achieve the objectives of the library, for example, the assessment of the increased program efficiency and effectiveness requires high emphasis on operations management.

i. Growth of collection

Table 5.65
Growth of information sources

S. No	Growth	Overall		Type of the institution		
		Frequency	Percentage	Government	Government aided	Self finance
1	Highly improved	17	22.1	4 23.5%	3 17.6%	10 58.8%
2	Improved	56	72.7	6 10.7%	16 28.6%	34 60.7%
3	Fairly improved	4	5.2	1 25%	0 0%	3 75.0%
	Total	**77**	**100**			

Result: Majority of the Arts and Science College (73) libraries affiliated to Bharathidasan University constantly improved their collection based on the mission of the institution and users' needs. Growth of collection helps to increase efficiency in service with low operations. User respondents felt that majority of the available

information sources (Text books = 79.3%, General books = 54.5%, Newspapers and magazines = 68 %, Journals = 52.3%, Reference = sources = 58.8%) in their libraries are used (Table 5.48).

ii. Low service High operations

Result: Librarians of Arts and Science College libraries affiliated to Bharathidasan University revealed that Online service, Inter Library Loan service, Cataloguing service and Consortium service are not provided effectively by their libraries and users also felt that above services are difficult to use (Table 5.22 and 5.48).

It is inferred that less used services need more attention and more operations by the library professionals. It helps to reduce the difficulties in services faced by the library users and it is matched with Nitecki evaluation method

Quadrant C: User Satisfaction

However, the growing awareness of library sources and services among users enhances its usage and helps to evaluate the quality of the service provided based on the perception of the users as to how well it meets their expectations are met.

Result: Majority of the Arts and Science College libraries affiliated to Bharathidasan University created awareness about the library collection through various operations (User access: Open = 69, Closed= 8; Classification: CC = 9, DDC=48,UDC = 1, Local = 19; Cataloguing : Local = 37, CCC =, 5,AACR =16, OPAC= 16, WEP OPAC = 3) and programmes (Tables 4.1 to 4.3). Such an awareness helps to increase the user satisfaction level (Adequacy of information sources = 82.3 %, Collection quality = 82.1%, Classification of sources = 79.8%, Cataloguing of

sources = 70.5%, Arrangement of information sources = 82.3%, Infrastructure = 81.6 %, Maintenance of library =84.6%, Working hours = 79.8%, Service quality = 87.6%, Staff attitude= 90.1%). (Table 5.52).

It is inferred that good level of collection development, proper management of information sources and creating awareness about the library collection increases user satisfaction.

Quadrant D: Positive Outcomes

Author stated that any library service helps to meet user needs based on the efficient operations by the libraries and this quadrant implies comparison of Services provided Vs Services utilized in the libraries

Results: Libraries as service organizations have developed programs to serve different users. Library and librarians should have a clear impression of their users' information needs and the mission the library. These user needs and library mission will shape the nature of the program evaluation conducted.

According to the use of librarians in Arts and Science Colleges affiliated to Bharathidasan University, Lending service, Reference service, Referral service, Current Awareness Service and Reprography service are provided to users in an effective manner. (Table 5.22) and user respondents also felt that such services could be used without difficulties. (Table 5.61)

It is inferred that services provided by the libraries in an effective manner enables users to utilize the services in an effective manner. More attention (or operations) on library programmes provided by the library implied and satisfied such programmes by its users.

CHAPTER VI

FINDINGS AND OBSERVATIONS

In this chapter major findings and observations based on the analysis is highlighted.

6.1 MAJOR FINDINGS OF THE STUDY

6.1.1 LIBRARIANS OPINION

6.1.1.1 Demographic

The sample represents, majority of the librarian respondents have research qualification (i.e. M. Phil (71.4%) and Ph. D (10.4%)), higher percentage of librarians belongs to the age group of 36- 45 years (44.2%) and half of the respondents are working in institutions located in rural areas (Table 5.1).

6.1.1.2 Book selection tools

i. Majority of the librarians are using Publishers catalogue (90.9%) as a book selection tool and Books in print (18.2%) are used as the least book selection tool (Table 5.2).

ii. Male (90.2%) and female (91.7%) librarians used Publishers catalogue for book selection. The male librarians preferred Web OPAC (14.6%) as the least tool for book selection whereas the female librarians preferred Books in print (13.9%) (Table 5.3).

iii. Librarians with below 5 years (86.2%), 5-10 years (91.7%) and above 10 years (95.8%) experience used Publishers catalogue for acquiring information sources for their libraries and Use the Books in print is the least method among the

librarians with an experience Below 5 years (10.3%) and Above 10 years (16.7%) whereas librarians with an experience of 5 -10 years experience have used Web OPAC (16.7%) as the least (Table 5.4).

6.1.1.3 Book selection methods

i. The Head of the Department (94.8%) is the key person involved in selection of the documents needed in the library based on the curriculum. It is followed by Faculty members (79.2%) of the department and Students (74%). Library Staff (39%) also suggest the documents based on the users' need and usage at the least level in the book selection (Table 5.5).

ii. It proves that there is a slight difference in deviation on the basis of gender factor in the Book selection process (Table 5.6).

iii The Head of the department and Faculty members play a key role in book selection process in Government (90.9% and 54.5% respectively), Government Aided (94.7% and 84.2% respectively) and Self finance (95.7% and 83% respectively) college libraries. At the least level of book selection methods, Library staffs participate in Government (18.2%) and Self Finance (38.3%) colleges whereas Management (31.6%) in Government aided colleges (Table 5.7).

6.1.1.4 Acquiring information sources

i. Majority of the librarians are acquiring information sources for library by means of inviting book sellers (54.5%) and it is followed by Standing vendor (40.3%) and Approval method (32.5%). At the least level, information sources are

acquired by librarians by visiting book fairs and exhibitions (24.7%) (Table 5.8).

ii. Male (56.1%) and female (52.8%) librarians always invite book sellers to library for acquiring information sources and this is ranked first. Quotations method is the least preferred method among male (34.1%) and female (25%) librarians (Table 5.9).

iii. Inviting book sellers is always preferred among the librarians who are working in rural (53.8%), semi urban (68.8%) and Urban (45.5%) institutions (Table 5.10).

iv. Government (27.3%) college librarians always invite the book sellers to acquire information sources for library whereas and Government aided college librarians used quotation method (52.6%) and Inviting sellers (63.8%) and Standing vendor (51.1%) are the most preferred methods adopted by the Self finance college librarians. Both Government (18.2%) and Self finance (36.2%) college librarians are not interested to organize book exhibitions for the purpose of acquiring information sources whereas Government aided college librarians are not interested in Visiting book fairs, festivals and exhibitions (15.8%) for the purpose of acquiring information sources (Table 5.11).

6.1.1.5 Mode of Communication

i. Majority of the librarians preferred placing order for information sources through Phone (Land line and Mobile) (54.5%) communication and least number of librarians have ordered information sources through fax (66.2%) (Table 5.12 and Fig. 5.1).

ii. Male librarians' preferred to use Phone communication (61%) but female librarians preferred Postal communication (47.2%). Fax communication is rarely preferred mode among the male (65.9%) and female (66.7%) librarians (Table 5.13).

iii. Phone communication is preferred by librarians who have an experience below 5 years (58.6%) whereas librarians with 6- 10 years of experience preferred Postal communication (66.7%) and librarians with more than 10years experience have preferred Face to face communication (58.3%) for acquiring information sources (Table 5.14).

iv. Face to face communication is ranked first by Government (36.4 %) and Government Aided (52.6%) College librarians but Postal and courier (68.1 %) and Phone (68.1%) Mode of Communication is ranked first by Self finance college librarians (Table 5.15).

6.1.1.6 Barriers to acquire information sources

i. Language barrier (51.9%) is the major barrier encountered by the librarians in acquiring information sources (Table 5.16 and Fig. 5.2).

ii. Language is the major barrier encountered by male librarians (51.2%) whereas female librarians (66.7%) encountered inadequate funds. Lack of co-operation is fewer barriers among male (46.3%) and female (55.6%) librarians (Table 5.17).

iii. Lack of equipments and Language barriers are the main problems among Government (36.4% and 45.5% respectively), Government aided (36.8% and

36.8% respectively) and Self finance college (34% and 59.6% respectively) librarians. Co-operation between librarians and users (Management, faculties, students and book Publishers and sellers) are in good level to acquire information sources (Table 5.18).

6.1.1.7 Management of information source collection

i. 93.5 percent (including more effective and effective) of the librarians have given importance (first rank) for proper maintenance of collection in libraries. Budgetary Control (74%) and Resource Sharing (36.4%) are the least preferences given by the librarians because most of the library budget is maintained by the authorities of the college (Table 5.19 and Fig. 5.3).

ii. Proper maintenance of library collection has been ranked as first by both male (61%) and female (50%) librarians. Secondly, Planning and policymaking have been done effectively by male librarians (61%) but Liaison by have been done effectively female librarians (58.3%). Least importance has been given to Resource sharing by male (53.7%) and female (52.8%) librarians at neutral (Table 5.20).

iii. Collection Maintenance is the prime management activity among Government (63.6% by effective), Government Aided (57.9% by more effective) and Self Financing (59.6% by effective) college librarians. Planning and Policymaking are the second important management activities among Government Aided (57.9%) and Self Financing (68.1%) college librarians whereas Government College Librarians have given importance to Collection analysis (81.8%). Least importance has been given by Government (36.4%), Government Aided

(36.8%) and Self Financing (29.8%) college librarians to Resource sharing (Table 5.21).

6.1.1.8 Library Services

i. Lending service (63.6%) is primarily provided by the librarians in more effective way. Reference (93.5%), Referral (76.6%), Reprography (55.8%) and Current Awareness Service (76.6%) are also provided effectively by the librarians. Inter Library Loan (53.2%) and Consortium (UGC Info net / N-List) services (46.8%) are provided by the library in a neutral level and Online service (49.4%) is given in a less effective manner (Table 5.22 and Fig. 5.4).

ii. Rural college libraries are provided with Lending (69.2%) and Reference services (100%) in an effective way whereas Inter Library Loan (56.4%) and online services (41%) are the least in a neutral way. The lending (93.7%)and reference services (93.3%) in semi urban college libraries are given more importance followed by Current Awareness Service(75%), referral (81.3%)and reprography(62.5%) services whereas Inter library loan(18.8%), Consortium service (62.5% at neutral level) and online services (37.5%) are considered the least. In urban colleges Lending service (95.5%) and Current Awareness Service (90.9%) are given more importance whereas Inter Library Loan (18.2%), Reprography service (13.6%), and Consortium service (22.7) are provided as the least service in libraries (Table 5.23).

iii. Lending service is positively felt by Government (100%), Government Aided (100%) and Self Finance (95.8%) College librarians. Reference, Referral and CAS services are provided by the Government (100%, 54.5% and 90.9%

respectively) Government Aided (100%, 89.5% and 94.7% respectively) and Self Finance (100%, 81.5% and 80.9% respectively) College Libraries and they are effective. Interlibrary Loan and Consortium service are provided less effectively by Government libraries (63.6% and 45.5% respectively) and effectively by Government aided College libraries (42.1% and 26.3% respectively) and neutrally by Self Finance (66% and 59.6% respectively) Colleges .Online services are given by Self Finance (46.8%) and Government (100%) college libraries by less effectively whereas more effectively by Government aided (36.8%) colleges (Table 5.24).

6.1.1.9 Problems in information source collection

i. Most common library collection problems in libraries are Misplacement and displacement (77.9%) of the documents followed by tearing pages (75.3%). Environmental control problem (28.6%) like temperature, humidity and lighting is the least problem encountered among the librarians (Table 5.25).

ii. Rural (79.5%) and urban (81.8%) college libraries faced higher problems in misplacement and displacement of library documents by the users whereas semi urban college libraries faced problems by tearing of pages (75%) (Table 5.26).

iii. Government (90.9%) and Self finance (76.6%) College libraries are highly faced problem in Misplacement and displacement whereas Government aided (84.2%) College libraries highly faced problems in tearing pages (Table 5.27).

6.1.1.10 Security measures

i. Library faculties have frequently visited stack rooms (94.8%) and this is the most used security measure by the librarians. Electronic security systems

(RFID) (5.2%) is the least security measure taken by librarians because of the cost of equipments (Table 5.28).

ii. Vigilance rounds by the library staff members is mostly followed by the male librarians (97.6%) whereas Proper shelving and frequent rectification are mostly used by the female librarians (94.4.%). An electronic security system (RFID) is the least technique used by the male (7.3%) and female (2.8%) librarians (Table 5.29).

iii. Vigilance rounds by the library staff members gets the highest rank among Government (81.8%), Government Aided (100%) and Self Finance College (95.7%) libraries related to security measures. Equal numbers (81.8%) of Government college librarians are using Manual Security, Checking Users ID card, Vigilance staff and Shelving and rectification. Electronic security systems are the least security measures applied by Government (18.2%), Government Aided (10.5%) and Self Finance college librarians (Table 5.30).

6.1.1.11 Preservation of Information sources

i. Cleaning and dusting (93.5%) and Proper shelving (93.5%) are the major factors which influence in order to preserve information resources followed by Good ventilation (90.9%) and Digital preservation (23.4%) which is the least factor used by the librarians (Table 5.31).

ii. Male librarians (97.6%) use Proper shelving technique to preserve the information sources but female librarians (97.2%) use Cleaning and dusting process. Good ventilation is the second process used among male (92.7%) and female (88.9%) librarians. Utilization of professional preservators and

conservators is the least process used by male librarians (26.8%) but female librarians (16.7%) use digital preservation (Table 5.32).

iii. Rural College libraries (97.4%) use Cleaning and Dusting process to preserve information sources whereas Semi Urban College Libraries highly use Cleaning and Dusting (93.8%), Good ventilation (93.8%) and Proper shelving process (93.8%) to preserve information sources and Urban college libraries follow Good ventilation (90.9%) and Proper shelving process (90.9%) in preserving information sources (Table 5.33).

iv. Government College libraries highly used Cleaning and dusting (90.9%) and proper shelving process (90.9%) in preserving information sources whereas Government Aided college libraries concentrated on Ventilation (100%) and Proper shelving (100%) of information sources in preserving information sources and Self finance college libraries concentrated on Cleaning and Dusting process (95.7%) (Table 5.34).

6.1.1.12 Information Resource Management skill

i. Majority of the librarians are highly skilled in Collection management (46.8%). It is followed by Service skill (39%), Maintenance skill (35.1%), and Collection development skill (24.7%), Record management skill (74%), Budget skill (20.8%) and Liaison skill (18.2%). The librarians have a poor level of skills in Preservation (35.1%) and Negotiation (40.3%) (Table 5.35).

ii. Male librarians are highly skilled in Collection maintenance (51.2%) followed by Service (46.3%) and Maintenance skill (34.1%) whereas female librarians have Collection maintenance (41.7%) followed by Maintenance (36.1%) and

Service skill (30.6%). Budget, Negotiation and Liaison skills need to be improved among male (14.6%, 36.6% and 19.5% respectively) and female (25%, 44.4% and 33.3% respectively) librarians (Table 5.37).

iii. Government aided college librarians have Service (52.6%), Collection Management (47.4%), Maintenance (42.1%), Collection development (42.1%) skills at a high level whereas Government college librarians have Service skill (81.8%) at moderate level and Self finance college librarians have Collection Management skill (48.9%). All types of college librarians (Government = 27.3 %, Government aided = 26.3 % and Self finance =48.9%) want to improve negotiation skill (Table 5.38 and Fig. 5.6).

iv. Librarians with an experience below 5 years feel that they are highly skilful in overall maintenance (100% including good and moderate level) followed by Collection Management skill (96.6%), Collection development skill (96.6%) and they want to develop Preservation (44.8%) and Negotiation (51.7%) skill. Librarians with 5– 10 years experience felt that they are very good in Collection maintenance (62.5%) skill followed by Service skill (45.8%) and Maintenance skill (37.5%) and they like to develop Preservation (33.3%), Liaison (16.7%) and Negotiation skill (29.2%). Librarians with an experience of above 10 years felt that they are highly skilled in Service (100% inclusion of good and moderate), Collection Management (100% inclusion of good and moderate), and Collection development (100% inclusion of good and moderate) (Table 5.39).

6.1.1.13 Evaluation of Information Resource Management

i. Library professionals have found the usage of information sources through circulation statistics (94.8%) (Table 5.40).

ii. Circulation statistics have used to evaluate usage of information sources among Government (100% including most frequently and frequently) and Government Aided colleges (94.7 % including most frequently and frequently) librarians whereas Self finance (76.6 % including most frequently and frequently) college librarians concentrated user statistics (Table 5.41).

6.1.2 USER OPINION TO INFORMATION RESOURCE MANAGEMENT

6.1.2.1. Demographic

i. Majority of the respondents are females (62.3%) and rural areas (47.8%). Equal share of respondents is from both Undergraduate and Post graduate level. It is further inferred that most of the respondents are from science disciplines (58.3%) (Table 5.42).

ii. 43 percent of library users access information sources through library catalogue. Library staff members (65.8 %) always support to the users and users felt that they have Information Resource Management skills in average (61.5 %) (Table 5.43).

6.1.2.2 Library visit

i. Majority of the respondents visit library for Preparing class notes (68.8%) in library followed by Borrowing library books (66%) and General reading (60%).

Preparing research papers (24.5%) rarely visit library by the respondents (Table 5.44).

ii. Majority of the male respondents (70.2%) always visit library for Borrowing books from the library followed by Preparing class notes (70.9%) whereas female respondents always use library for Preparing class notes (67.5%) followed by Borrowing library books (63.5%). Gathering information related to Higher education and placements is the least purpose of library visit among male respondents (34.4%) whereas female respondents are preparing research papers (36.5%) as the least pursuit (Table 5.45).

iii. Majority of the Government (65%) and Self finance college (65.5%) users respondents visit library for Preparing class notes in first rank whereas Government Aided (75%) respondents visit library to Borrowing library books (Table 5.46 and A1.1).

iv. Preparing class notes (73.1%) is the major visit by the arts discipline respondents whereas science discipline respondents visit for Borrowing books (68.2%). Preparing research papers is the least reason to visit among arts (37.1%) and science (43.3%) discipline respondents (Table 5.47 and A1.2).

6.1.2.3 Usefulness of information sources

i. Textbooks (79.3%) are the major information resources used by the academic library users. Electronic resources (26.8%) and thesis, reports, and dissertations (14.8%) are the least used information sources by the respondents (Table 5.48).

ii. Textbooks and Newspaper/magazines are ranked first and second as the most useful information sources by both the male (80.1% and 70.2% respectively) and female (78.7% and 66.7% respectively) respondents. Similarly e-resources and Thesis/reports/dissertation are the least used information sources by both male (25.2 % and 18.6 % respectively) and female (27.7 % and 17.3 % respectively) respondents and they are ranked as the sixth and seventh respectively (Table 5.50 and A2.1).

iii. Higher percentage of science (80.3%) discipline respondents are used text books when compare to arts (77.8%) discipline respondents (Table 5.51 and A2.2).

6.1.2.4 Satisfaction level of information resources

i. Majority of the respondents are highly satisfied with Staff attitude (90.1%) to satisfy various sources and facilities. It is followed by Service quality (87.6%), Maintenance of library (84.6%) and Adequacy of information sources (82.1%). Cataloguing of sources are least (10^{th} rank) satisfied various source and facilities by the respondents (Table 5.52).

ii. Staff attitudes are highly satisfied by majority of the male (88.1%) and female (91.2 %) respondents. Cataloguing of sources is the least satisfied source among male (15.2 % including dissatisfied and highly dissatisfied) and female (21.7%) respondents (Table 5.53 and A3.1).

iii. Majority of the Government (80%) and Self Finance (92.5%) College respondents are satisfied with the Staff attitude but Government aided (84%) college respondents are satisfied with the Maintenance of library. Cataloguing

of sources are the least satisfied among Government (61%) and Self Finance college (75.5%) respondents whereas Arrangement of information sources (84%) is the least source among Government aided college respondents (Table 5.54, Fig. 5.8 and A3.2).

iv. Majority of the Rural and Semi urban college respondents are satisfied with Staff attitude (90.1% and 91% respectively) followed by Maintenance of library (85.9% and 83.4% respectively), Service quality (87.5% and 87.5% respectively) and Adequacy of information sources (82.2% and 82.7% respectively) whereas urban college respondents are satisfied with Service quality (87.7%), Staff attitude (87.7%) followed by Maintenance of library (83.1%). Majority of the rural (14.1 %), semi urban (20.2%) and urban (4.6%) college respondents are not satisfied with Cataloguing of sources (Table 5.55 and A3.3).

V. Service quality (88.6%) and Staff attitude (89.8%) are highly satisfactory among arts discipline respondents whereas Service quality (86.7%) is highly satisfactory among science discipline respondents. Cataloguing of sources is the least level of satisfaction among the arts (15 %) and science (14.6 %) discipline respondents (Table 5.56 and A3.4).

6.1.2.5 Order of preferences given in the library among users

i. User respondents give preference to library staff co- operation (91.3%) followed by Right selection of information sources (87.3%), Motivational factor (87.8%), Relevancy of academic sources (84.5%) and Solving academic problems

(85.3%). Users give the least preference to e-resources (47.5%), Fast access of information sources (78.5%) and Technical assistance (79.3%) (Table 5.57).

ii. Male user respondents highly preferred library staff co- operation (88 %) followed by Relevancy of resources (88.1%), Right selection of information sources (87.4%) but electronic resources (49 %) is the least preference among the male respondents. In case of female user respondents, Library staff co-operation (93.2%) is highly preferred, followed by Motivational factor (88.3%), Right selection of information sources (87.2%) and electronic resources (46.6%) is the least preference (Table 5.58 and A4.1).

iii. Government college library respondents highly preferred Library staff co-operation (92%) whereas Government aided college user respondents give high priority to Relevancy of information sources (89%). Self finance college respondents give priority to Right selection of information sources (91.5%) and Electronic resources is the least preferred by Government (55%), Government Aided (55%) and Self finance (40%) college user respondents (Table 5.59 and A4.2).

iv. Library staff co-operation has given higher priority in rural (93.7%) college library respondents whereas Right selection of information sources is the highest importance given by Semi urban (90.3%) college library respondents. Overall performance is the highest preference given by urban (90.8%) college library respondents and Electronic resources is given the least preference among rural (47.6%), semi urban (44.4%) and urban (53.9%) college library user respondents (Table 5.60 and A4.3).

6.1.2.6 Difficulties in service

i. Using of online service (46.5%) is always a problem among the users followed by Inter library loan (32.3%), Catalogue (30.5%), Consortium (19%), and Current Awareness Service (28.5%). Lending service (71.8%), Reference service (69.8%) and Referral service (67.5%) never faced problems among users (Table 5.61).

ii. It is proved that there is no significant gender deviation in facing difficulties related to the use of various library services provided by the libraries (Table 5.62 and A5.1).

iii. Regarding the difficulties faced in using the various library services provided by the library they are almost similarly identified by Government, Government aided and Self finance College respondents. Online service and Inter library loan are always the problems in all types of college users (Table 5.63 and A5.2).

iv. Rural (46.6%), Semi urban (47.2%) and Urban (44.6%) college respondents always faced problem in using Online service. Lending service, Referral service and Reference service are convenient services among Rural (73.8%, 68.6% and 69.1% respectively), Semi urban (70.8%, 69.4% and 71.5 % respectively) and Urban (67.7%, 60% and 67.7% respectively) college respondents (Table 5.64 and A5.3).

6.1.3 FINDINGS IN RELATION TO HYPOTHESES

The hypotheses framed for the thesis has been tested with various statistical tools and the results are as follows,

i. There is significant difference in the mode of acquiring information sources and location of the college libraries (Table 5.10).

ii. Chi square values confirmed that there is a significant difference between experience of librarians and the use of book selection tools (Table 5.4).

iii. There is no significant association between Government, Government Aided, Self financing college libraries in providing various library services (Table 5.24).

iv. Significant difference between the experience of librarians and Information Resource Management skills possessed by the librarians is proved by Chi square test (Table 5.39).

v. Significant relation between experience of librarians and mode of communication technology in acquiring information resource is proved by Chi square test (Table 5.14).

vi. There is no significant association between the type of institutional library users and their purpose of visit and it is proved by Chi square test (Table 5.46).

vii. There is no significant difference based on the discipline and information sources used for their need (Table 5.50).

viii. Significant difference in the satisfaction of library resources and facilities among the various disciplines is proved by Chi square test (Table 5.56).

ix. There is no association between the order of preferences in the various resources and supporting services among the nativity users and it is confirmed by chi square test (Table 5.60).

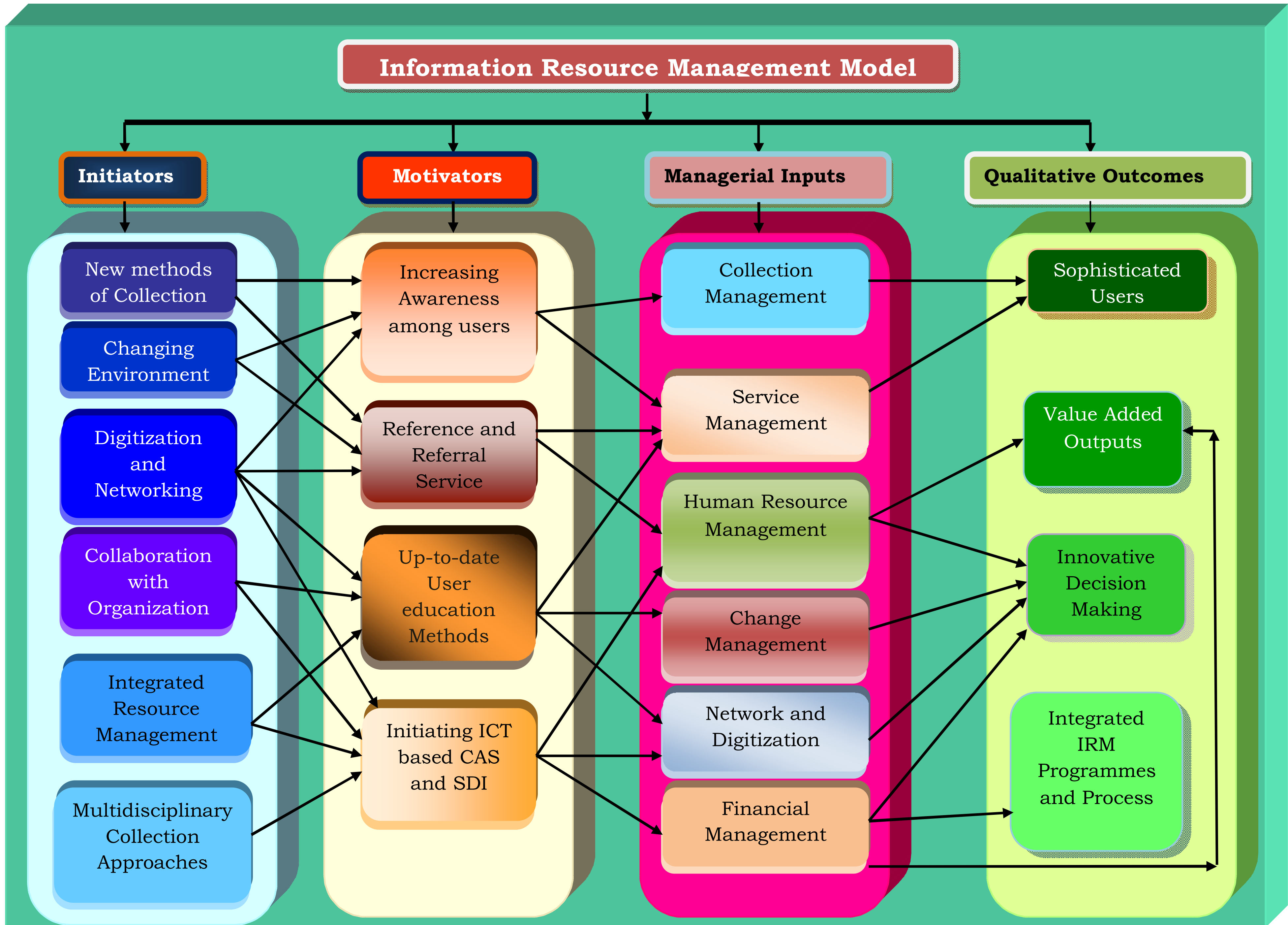
x. Significant difference in difficulties encountered by the different types of institutional users and their getting various library services is proved by Chi square test (Table 5.63).

6.2 PROTOTYPE DESIGN MODEL FOR INFORMATION RESOURCE MANAGEMENT

Information Resource Management helps to manage information sources in the suitable way and the users utilize the managed information sources to fulfill the educational needs. Library professionals should be ready to adopt innovation and challenges in their libraries for managing information resources and the users should create interest and awareness to utilize information resources. From a consideration of the above factors, a prototype model has been suggested and the same is shown in Figure 6.1.

Brief description of the model

The prototype Information Resource Management model divides into four major parts which are Initiators, Motivators, Managerial inputs and Qualitative outcomes. Initiators part deals with the collection of information source through new methods, resource sharing (collaboration), multidisciplinary collection through networking in different environment and manage different resources like financial and human resources. Motivator section creates awareness related to use of information source, library facilities, and current information for the user community. Application of managerial thoughts to information source collection, library service, human resource, finance and networking constitute managerial inputs. Better management of information source collection and service enables the users to enjoy the fruits of knowledge society. Human resource competency provides value added outputs in the sense of service and innovative decision making for fulfilling the user needs and library objectives and financial management provides qualitative outcomes to value added service, decision making and Information Resource Management process.


Information Resource Management Model
Initiators
Motivators
Managerial Inputs
Qualitative Outcomes
New methods of Collection
Changing Environment
Digitization and Networking
Collaboration with Organization
Integrated Resource Management
Multidisciplinary Collection Approaches
Increasing Awareness among users
Reference and Referral Service
Up-to-date User education Methods
Initiating ICT based CAS and SDI
Collection Management
Service Management
Human Resource Management
Change Management
Network and Digitization
Financial Management
Sophisticated Users
Value Added Outputs
Innovative Decision Making
Integrated IRM Programmes and Process

6.3 SUGGESTIONS

The data analysis and interpretation of the results and observations have contributed to the formulation of suggestions as outlined below in regard to Information Resource Management.

1. Along with appointing vendor, it is suggested that librarians should visit bookshops and book fairs regularly for knowing and purchasing current books and journals in the existing subjects.

2. It is suggested that Government and management of Self financing colleges should take necessary steps to establish network inside the campus and libraries may be fully automated to give better and faster services to the users.

3. Library professionals should strive to create awareness among the users about various library programmes such as Online, Consortium and Inter Library loan service and managements should develop facilities in such programmes.

4. The study found that majority of the library professionals is weaker in ICT skill, Preservation skill and Liaison skill. Management of colleges should organize faculty development programmes continuously and permit them to attend workshops and conferences in order to improve their knowledge and skills for providing effective services to the users.

5. Along with regular financial support, Government, Government Aided and Self financing College librarians should apply for financial grants from various suitable agencies and organizations run by Central government and State

government, etc. Authorities of colleges should concentrate more to develop facilities and efficient programmes in the libraries.

6. State Government should take necessary steps to appoint the librarians in Government colleges and give approval for appointing librarians in Government aided colleges. Management of Self financing colleges should appoint qualified professionals with a good salary structure.

7. Management and library professionals should realize the importance of information sources so that preservation of information sources would be done properly.

8. It is suggested that Arts and Science college libraries affiliated to Bharathidasan University should establish a separate building for library to provide a good atmosphere to the user community.

9. Librarians should arrange the extra hours after the closing hours of college to the users for their reading and reference.

10. Librarians of Arts and Science College should purchase journals to use for improving their knowledge in knowing the current development in their field.

11. Librarians should arrange awareness programmes on using library sources and services regularly.

12. The librarians should take necessary steps to improve the users' ICT skills by arranging short term programmes.

6.4 POTENTIAL AREAS FOR FUTURE RESEARCH

The present study, the researcher suggested the following topics in future research.

1. The study may be extended to University libraries in Tamilnadu.
2. Comparative study of Information Resource Management in Medical college libraries and Engineering college libraries.
3. The study on usage of Information Resource Management in research and development institutions.
4. Evaluation of Information Resource Management in Engineering colleges.

6.5 CONCLUSION

Information source is regarded as a valuable resource which should be managed based on the user needs, institutional objectives and library science philosophy. The main focus of the library professionals related to Information Resource Management must be on key factors such as Environment created by the library and users, Rethinking about role played by the librarian, college management, users and publishers, Application of technology, Integration of various sections and services, Problems and difficulties encountered in the library and Concentrating on various resources like human and financial resources for better management.

Bibliography

1. Adekanmbi, Arinola Rebecca & Boadi, Benzies Y. (2008). Problems of developing library collections : A study of colleges of education libraries in Botswana. *Information Development*, 24 (4), 275-288.

2. Afshari H. & Khosravi Sh. (2009). Information Resource Management maturity model. *World of Academy of Science, Engineering and Technology*, 25, 258- 263.

3. Ajegbomogun, F O. (2004). Users' assessment of library security: A Nigerian university case study. *Library Management* , 25 (8/9), 386-390.

4. Akeroyd, John. (2005). Information management and e-learning: Some perspective. *Aslib Proceedings,* 57 (2), 157 – 167.

5. Allen, Frank R. & Dickie, Mark. (2007). Toward a formula-based model for academic library funding: Statistical significance and implications of a model based upon institutional characteristics. *College & Research Libraries*, 68 (2), 170-181.

6. Amitava, Bhattacharyya. (2010). Information Resource Management: The organisations' need for a secure approach. *SRELS Journal of Information Management,* 47, (3), 279-282.

7. Antonesa, Mary. (2007). Challenging times: some thoughts on the professional identity of the academic librarian. *SCONUL Focus*, 40, 9-11.

8. Applegate, Rachel. (2009). Who benefits? Unionization and academic libraries and librarians. *Library Quarterly*, 79 (4), 443-463.

9. Audit Report No. OIG-AR-OI-OO Review of the commission's Information Resources Management function, September 29, 2000.

10. Balakrishnan & Ramji. (1991). Information acquisition and resource allocation decisions. *The Accounting Review,* 66 (1), 120-139.

11. Bavakutty, M. (1986) College library personnel in Kerala. *International Library Review*, 18(2), 187-194.

12. Bello, M A. (1988). Library security, materials theft and mutilation in technological university libraries in Nigeria. *Library Management*, 19 (6), 379 – 383.

13. Berman, Yitzhak & Phillips, David. (2001). Information and social quality. *ASLIB Proceedings*, 53 (5), 179 – 188.

14. Best, David P. (2010). The future of information management. *Records Management Journal,* 20 (1), 61-71.

15. Bharathidasan University. Retrieved December 13, 2009, from http://www.bdu.ac.in.

16. Bhargava, Vijay & Vijayavergiya. (2000). Preserving the information content of old documents: Some issues. *Annals of Library Science and Documentation*, 47(1), 1-4.

17. Bin, Guo. (2009). Moderating effects of task characteristics on information source use: An individual-level analysis of R&D professionals in new product development. *Journal of Information Science*, 35, 527-547.

18. Blass, Gary D. et al. (1991). Finding government information: The Federal Information Locator System (FILS). *Government Information Quarterly*, 8, (1), 11-32.

19. Bolger, Dorita F. & Smith, Erin T. (2006). Faculty status and rank at Liberal arts colleges: An Investigation into the correlation among faculty status, professional rights and responsibilities, and overall institutional quality. *College & Research Libraries*, 67 (3), 217-229.

20. Bracke, Marianne Stowell et al. (2007). Finding information in a new landscape: Developing new service and staffing models for mediated information services. *College & Research libraries*, 68, 248- 267.

21. Brown, Deborah & Leith, Dean. (2007). Integration of the research library service into the editorial process: Embedding the librarian into the media. *ASLIB Proceedings*, 59 (6), 539 – 549.

22. Brussaard, B.K. (1988). Information resource management in the public sector. *Information & Management,* 15 (2) ,85–92.

23. Bryce, Tim. (2007). What is Information Resource Management? : An overview of a concept for getting your IT house in order. *AIIM E - Doc Magazine,* 21 (3), 46 – 47.

24. Burnard, Philip (2010). *Interpersonal skills training: book of activities*. New Delhi: Viva books.

25. Business dictionary. Retrieved January 02, 2010, from http://www. businessdictionary.com/definition/information-resources- management-IRM.

26. Cassella, Maria & Morando, Maddalena. (2012). Fostering new roles for librarians: Skills set for repository managers — Results of a survey in Italy. *Liber Quarterly,* 21 (3/4), 407–428.

27. Caudle, Sharon L. (1996). Strategic information resources management: Fundamental practices. *Government Information Quarterly*, 13(1), 83–97.

28. Chalekian, Paul. (2005). Centralized Information Resource Management and budget periodicity. *Information Resources Management Journal*.

29. Chao, Hung-Po. (1981). Exhaustible resource models: The value of information. *Operations Research*, 29 (5), 903-923.

30. Cheney, Debora et al. (2006). Convergence in the library's news room: Enhancing news collections and services in Academic libraries. *College Research Library,* 67, 395-417.

31. Cheng, T.C.E. & Kanabar, V. (1992). On some issues of information resource.

32. Chepaitis, Elia V. (1994). After the command economy: Russia's information culture and its impact on Information Resource Management. *Journal of Global Information Management,* 2(1), 7.

33. Christozov, D. (2003). Real live cases in training management of information resources during the transition to market economy. In T. McGill (Ed.), *Current Issues in IT Education,* 297-303. Hershey, PA: IRM Press.

34. Clough, Peter & Nutbrown, Cathy. (2007). A student's guide to methodology (2nd ed.). London: Sage Publications, 22.

35. Collins, Tim. (2012). The current budget environment and its impact on libraries, publishers and vendors. *Journal of Library Administration*, 52 (1), 18-35.

36. Cook, Colleen, Heath, Fred & Thompson, Bruce. (2001). Users' hierarchical perspectives on library service quality: A "LibQUAL+" study. *College & Research Libraries*, 62 (2), 147-153.

37. Corbitt, Terry. (2003). Information management. *Management Service,* 47 (3), 20.

38. Cottrell, Terry. (2011). Hedge your budget risk through service increases. *Bottom Line: Managing Library Finances*, 24 (1), 6-12.

39. Cross, Roger L. (2011). Ripe for the plucking: centralized and consolidated library budgets as revenue streams for profit. *Bottom Line: Managing Finances*, 24 (2), 140-144.

40. Cuillier, Cheryl & Stoffle, Carla J. (2011). Finding alternative sources of revenue. *Journal of Library Administration*, 51 (7/8), 777-809.

41. Culbertson, Michael & Wilde, Michelle. (2009). Collection analysis to enhance funding for research materials. *Collection Building*, 28(1), 9-17.

42. Current issues for higher education Information Resource Management. *Cause/ Effect*, 18 (2) (summer 1995) 5-7.

43. De Groote, Sandra L. et al. (2005). Quantifying Cooperation: Collaborative Digital Reference Service in the Large Academic Library. *College research library,* 66,436-455.

44. Dias, C. (2001). Corporate portals: a literature review of a new concept in information management. *International Journal of Information Management*, 21, 269-287.

45. Diebold, J. IRM: New directions in management. *Infosystems*, 26 (10), 41-42.

46. Dinesh, K. S. & Nikain, Khaiser. (2007). Strategies for effective library and information centre management. *SRELS Journal of Information Management*, 44 (3), 237-248.

47. Doherty, Neil Francis, Anastasakis, Leonidas & Fulford, Heather. (2011). Reinforcing the security of corporate information resources: A critical review of the role of the acceptable use policy. *International Journal of Information Management*, 31 (3), 201-209.

48. Donlan, Rebecca. (2006). How much does biology really need, anyway?: Determining library budget allocations. *Library Issues*, 26 (6), 1-4.

49. Edelman, Franz. (1981). The management of information resources - A challenge for American business. *Management Information Systems Research Center*. 5 (1), 17-27.

50. Edward, Stear & Wecksell, Joel B. (1997). Information Resource Center Management (IRCM). *American Society for Information Science. Bulletin of the American Society for Information Science,* 23 (4), 15.

51. Ein-Dor, Phillip & Segev, Eli. (1988). Information Resources Management for end user computing: An exploratory study. *Information Resources Management Journal,* 1 (1).

52. English, Larry P. (2001). *Elevating the role of Information Resource Management for business effectiveness*. Toronto: Information Resource Management Association of Canada.

53. Essex, Patricia A, Magal, Simha R. & Masteller, Douglas E. (1998). Determinants of information center success. *Journal of Management Information Systems,* 15 (2), 95-117.

54. Ezeala, Lily Oluebube. (2009). Effectiveness of library resources in the libraries of agricultural research institutes in Nigeria. *Library Philosophy and Practice,* 238 – 244.

55. Fallis, Don & Whitcomb, Dennis. (2009). Epistemic values and information management. *The Information Society,* 25, 175–189.

56. Feng, R & Bao, Z. (2007). International Federation for Information Processing (IFIP). *Research and Practical Issues of Enterprise Information Systems II*, 2 (255), 1545-1555.

57. Feng, Xiuzhen. (2008). A dual loop model for Managing Information Resource.

58. Ferguson, Chris. (2000). Shaking the conceptual foundations,' Too: Integrating research and technology support for the next generation of information service. *College & Research Libraries,* 61 (4), 300-311.

59. Fitsimmons, Gary. (2009). Resource management: information. *The Bottom Line: Managing Library Finances,* 22 (4), 131-134.

60. Gangatharan M. (2004). Information Resources Management in the 21st century. *SRELS Journal of Information Management,* 41 (1), 57- 66.

61. Gravetter, Frederick J & Forzano, Lori-Ann B. (2009). Research methods for the behavioural sciences (3rd ed.). Australia: Wadsworth Cengage Learning.127.

62. Green, Harriett. (2013). Libraries across land and sea: Academic library services on international branch campuses. *College Research Library,* 74, 9-23.

63. Gregson, Ken. (1995). Information resource management. *Work Study,* 44 (1), 20- 22.

64. Gruber, William H. (1983). Information resource management for corporate decision support. AFIPS Spring conference. AFIPS, 409-413.

65. Guarria, Charles I. (2009). How using an allocation formula changed funding allocations at Long Island University. *Collection Building*, 28 (2), 44-50.

66. Guimaraes, Tor. (1988). Information Resources Management: Improving the focus. *Information Resources Management Journal*, 1 (1), 10-21.

67. Han et al. (2012). Information Resource Planning and Management: An interactive model. *International Journal of Software Engineering*, 5 (1), 99-112.

68. Han, Jianchao et al. (2011). An Event-Driven Interactive Model of Information Resource Management. *International Journal of Software Engineering*, 5 (1), 99- 112.

69. Han, Lifeng & Goulding, Anne. (2003). Information and reference services in the digital library. *Information Services & Use*, 23, 251–262.

70. Harer, John B & Cole, Bryan R. (2005). The importance of the stakeholder in performance measurement: Critical processes and performance measures for assessing and improving academic library services and programs. *College Research Library,* 66, 149-170.

71. Harsha, P et al. (2011). Classification and regression tree-based analysis for forecasting and mapping of funding pattern. *Information Studies,* 17 (1), 39- 46.

72. Hatton, I. A. McCann, K. S. Umbanhowar, J. & Rasmussen, J. B. (2006). A Dynamical approach to evaluate risk in resource management ecological applications. *Ecological Society of America Stable,* 16 (3), 1238-1248.

73. Hernon, Peter. (1994). Information life cycle: Its place in the management of U.S. government information resources. *Government Information Quarterly*, 11(2), 143–170.

74. Higher education. Retrieved March 10, 2010, from http:// www.tndce.in aboutus.html Retrieved on 10.03.2010.

75. Horton, F.W. (1979). Information resources management: Concept and cases. Cleveland. OH: Associations for Systems Management.

76. Hsu, Cheng et al. (1991). Information Resources Management in heterogeneous, distributed environments: A Metadatabase approach. *IEEE Transactions on Software Engineering,* 17, 6.

77. Hu, Haibo. (2010). A framework for management of information resources in E-Government. International Conference on E-Business and E-Government - ICEE, 655-658.

78. Hu, Yanli. (2006). A market-based Information Resource Management approach in information grid. *Emerging Trends and Challenges in Information Technology Management,* 3, USA: Information Resources Management Association.

79. Hutchens, Philip H. (1998). Information management and the decision maker. *ARMA Records Management Quarterly,* 32 (4), 28-31.

80. Hwang, Ming-Jiu & Chen, Yun-Hua. (2008). A goal programming model for the budget allocation of academic library. *Journal of Educational Media &* Library *Sciences*, 46 (2), 151-181.

81. Ibraheem, Abiodun I. & Devine, Christopher. (2013). A survey of the experiences of African librarians in American academic libraries. *College Research Library,* 74, 288-306.

82. IGNOU Course Material (2005). EEC 13: Elementary statistical methods and survey techniques. Block 7.

83. Iqbalahmad, U Rajgoli, Christina, Birdie & Karisiddappa, C R. (2006). Use of information resources through consortia mode in Indian library and information centers: A case study of FORSA consortium. *SRELS Journal of Information Management,* 43 (1), 37- 49.

84. Jackowski, Edward M. (1988). Developing an Information Resource Management plan. *Public Productivity Review,* 11 (3), 3-13.

85. Jackson, Sherri L. (2009). Research methods and statistics: A critical thinking approach. (3rd ed.). Australia: Wadsworth cengage learning, 57- 70.

86. James-Gilboe, Lynda. (2010). Raising the Library profile to fight budget challenges. *Serials Librarian*, 59 (3/4), 360-369.

87. Jana, Lakshmikanta & Panigrahi, Pijushkanti. (2010). Motivating parameters for betterment of library services: An evaluative study among non-government college librarians in West Bengal. *Annals of Library & Information Studies*, 57 (1), 12-20.

88. Johanna. Rivano Eckerdal (2012). Information sources at play: The apparatus of knowledge production in contraceptive counselling. *Journal of Documentation*, 68 (3), 278 – 298.

89. Johansen, Jane & Gillard, Sharlett. (2005). Information resources project management communication: personal and environmental barriers. *Journal of Information Science*, 31 (2), 91-98.

90. Jukic, Nenad & Jukic, Boris. (2010). Information system planning and decision making framework: A case study. *Information Systems Management*, 27, 61–71.

91. Kalyan, Sulekha. (2003). Library materials budget allocation strategy for a Mid-Size Academic library: A case study. *Acquisitions Librarian*, 15 (29), 119.

92. Kangas, K. (2003). The resource-based theory of the firm: The new paradigm for Information Resources Management?. In K. Kangas (Ed.), *Business Strategies for Information Technology Management.* Hershey, PA: IRM Press. 129-148.

93. Kasprowski, Rafal. (2006). Recent developments in electronic resource management in libraries. *Bulletin of the American Society for Information Science and Technology,* 32 (6), 27- 33.

94. Kasprowski, Rafal. (2007). Standards in electronic resource management. *Bulletin of the American Society for Information Science and Technology,* 33 (6), 32- 37.

95. Kattimani, Parashuram S. (2010). Quality awareness of Online information resources: A study. *International Journal of Library and Information Science,* 2 (2).

96. Kennedy, Marie R. Brancolini, Kristine R. (2012). Academic librarian research: A survey of attitudes, involvement, and perceived capabilities. *College Research Library,* 73,431-448.

97. Khoo, Michael & MacDonald. Craig. (2011). Organizational model for digital library evaluation. Berlin Heidelberg : Springer-Verlag, 329–340.

98. Khosrow- pour, Mehdi ed. (2010). *Global, social and organizational implications of emerging information resource management: Concepts and applications*. Hershey, PA: Information science reference.

99. Khosrow- pour, Mehdi. (2005). *Advanced topics in information resource management*. Hershey: Idea group publishing.

100. Kiernan, Donald E. & Lyles, Royce. (1975). Resource management system: City of Jacksonville. *Public Productivity Review,* 1(1), 9-21.

101. Kim, Kyung-Sun & Sin, Sei-Ching Joanna. (2011). Selecting quality sources: Bridging the gap between the perception and use of information sources. *Journal of Information Science*, 37, 178-188.

102. King, John L. & Kraemer, K.L. (1987). Information Resource Management in the U.S. Federal Government: An assessment of the concept and its promise. Irvine : Information and Computer Sciences, University of California.

103. King, Monica Moran, Larsen-Ruffin, Bill & Stewart, Nate. (2000). Usage statistics and security: Twin concerns for libraries. *Library Computing,* 19 (1/2), 98- 105.

104. Kinkus, Jane. (2007). Project management skills: A literature review and content analysis of librarian position announcements. *College Research Library,* 68, 352-363.

105. Kont, Kate-Riin, Kollist, Andres & Jantson Signe. (2012). Financing of estonian research libraries: The happy days and the economic crisis. *Slavic & East European Information Resources,* 13 (1), 73-88.

106. Krtalic, Maja & Hasenay, Damir. (2012). Exploring a framework for comprehensive and successful preservation management in libraries. *Journal of Documentation*, 68 (3), 353– 377.

107. Kulandaiswamy, V.C. (2003). *Higher education India: Crisis in management*. New Delhi: Viva books.

108. Kumar, Devendra & Singh, Rajkumar. (2009). Information resources and services of national science library India, New Delhi: A user study. *International Journal of Library and Information Science*, 1 (2), 17–21.

109. Lai, Maosheng et al. (2010). *Information Resources Development in China.* USA: Information Resources Management Association, 9.

110. Lata, S. & Sharma, S. (2013). Use and usage of information sources and services in T.S. Central State Library, Chandigarh: A user study. *International Journal of Information Dissemination and Technology*, 3(2), 89- 93.

111. Law, Wai K. (2002). *Information resources development challenges: A case study at the University of Guam*. USA: Information Resources Management Association, 3.

112. Lee- davies, Linda &Bailey, Susan (2006). *Developing work and study skills*. Australia: Thomson.

113. Lewis, Bruce R, Syndefr, Charles A & Rainer, Kelly JR. (1995). An empirical assessment of the information resource management construct. *Journal of Management Information Systems*, 12(1), 199.

114. Lindenfield, G & Lindenfield, S. (2005). Confident networking for career success and management: New challenges for the nineties. *Government Information,* 11(3), 301-314.

115. Long Li, Zhen & Ming Zhao, Xiao. (2007). Governmental Information Resources Management base on metadata. International Federation for Information Processing (IFIP), 252, 333-339.

116. Lytle, R.H. Information resource management (1981-1986). *Annual Review of Information Science and Technology*, 21, 9-16.

117. Mahesh, G. & Gupta, Dinesh Kumar. (2008). Changing paradigm in journals based current awareness services in libraries. *Information Services & Use*, 28 (1), 59-65.

118. Maidabino, A. A. (2012). Theft and mutilation of print collection in university libraries: A critical review of literature and proposed framework for action. *Annals of Library and Information Studies*, 59(4), 240-247.

119. Malanchuk, Iona R. & Ochoa, Marilyn N. (2005). Academic librarians and outreach beyond the college campus. *Southeastern Librarian*, 53 (3), 23-29.

120. Manjunathr, Lohar & Mallinath, Kumbar. (2007). Teachers' attitudes towards library facilities and information resources in first grade colleges in Shimoga district: A survey. *SRELS*, 44 (2), 179- 206.

121. Mansfield, Daren. (2009). Reducing book theft at university libraries. *Library and Information Research,* 33, 103.

122. Martin, Jim & Zaghloul, Raik. (2011). Planning for the acquisition of Information Resources Management core competencies. *New Library World*, 112 (7/8), 313-320.

123. Mathews, Janie M. & Pardue, Harold. (2009). The presence of IT skill sets in librarian position announcements. *College Research Library,* 70,250-257.

124. Mathis Beath, Cynthia & Detmar W, Straub. (1991). Department level Information Resource Management: A theoretical argument for a decentralized. *Journal of the American Society for Information Science,* 42(2), 124-127.

125. Matsudaira, Kazuya, Ichikawa, Teruhisa & Mizuno, Tadanori. (2008). Effect analysis in implementing Information Resources Management to enterprise part III, *Springer-Verlag Berlin Heidelberg* LNAI 5179, 152 – 158.

126. Matthews, Joseph R. (2013). Valuing information, information services, and the library: Possibilities and realities. *Portal: Libraries & The Academy*, 13 (1), 91-112.

127. Mayer, Jennifer & Terrill, Lori J. (2005). Academic librarians' attitudes about advanced-subject degrees. *College Research Library,* 66, 59-73.

128. Meyer, Michael E. (1981). A standard tool for information resource management. Conference: AFIPS Spring Conference - AFIPS, 225-230.

129. Montelongo, Jose A. et al. (2010). Being a librarian isn't enough: The importance of a non-library research agenda for the academic librarian: A case study. *College & Undergraduate Libraries*, 17 (1), 2-19.

130. Moody, Daniel L. (2000*). Measuring Information Health: A Planning and Evaluation Tool to Support IRM Practice*. USA: Information Resources Management Association, 5.

131. Moskowitz, M & Schmidt, J. (1989). Managing the college library's acquisitions budget. *Managing the College Library's Acquisitions Budget*, 49-68.

132. Moyer, L. S. (2005). Library funding in a budget-cut world. *Bottom Line: Managing Library Finances*, 18 (3), 112-115.

133. Muir, Scott. (2007). RFID security concerns. *Library Hi Tech*, 25 (1), 95-107.

134. Munson-McGee, Melody L. & Thompson, Bruce C. (1995). Resource Management: A Challenging Profession in a Changing World. *Wildlife Society Bulletin,* 23 (4), 564-567.

135. Nguyen, Khanh. (2012). Top-K data source selection for keyword queries over multiple XML data sources. *Journal of Information Science*, 1.

136. Ning, Zhou (2008). Visualization Model for Information Resources Management. Information Visualisation, 2008. IV '08. 12th International Conference . London : IEE Computer Society.

137. Nitecki, Danuta A. (2004). Program evaluation in libraries: relating operations and client. *Archival Science*, 4, 17–44.

138. Noh, Younghee. (2012). The impact of university library resources on university research achievement outputs. *ASLIB Proceedings*, 64 (2), 109-133.

139. Nzivo, Charles N. & Chuanfu, Chen. (2013).International students' perception of library services and information resources in Chinese academic libraries. *Journal of Academic Librarianship*, 39 (2), 129-137.

140. O'Brien, James A. & Morgan, James N. (1991). A multidimensional model of Information Resource Management. *Information Resources Management Journal,* 4 (2), 11.

141. Oakleaf, Megan & Owen, Patricia L. (2010). Closing the 12 - 13 gap together: School and college librarians supporting 21st century learners. *Teacher Librarian*, 37 (4), 52-58.

142. Ogunniyi, Samuel O. & Adeniji, M. Jato. (2011). Availability of library resources and services to students in selected private secondary schools in Ondo west local government area of Ondo State, Nigeria. *International Journal of Library Science,* 4 (A11).

143. Oshilalu, Habdulhakeem Adeyinka. (2011). Emergence of electronic library resources: A threat to librarians? *International Journal of Library and Information Science*, 3(2), 29–33.

144. Ossai, Ngozi Blessing. (2011). How law students utilize information resources: A case study of the University of Benin, Benin City. *International Journal of Library and Information Science*, 3 (1), 1–14.

145. Ovowoh, Robert Orotomah & Iwhiwhu, Basil Enemute. (2010). Preserving information-bearing material in higher education institutions in Nigeria. *Library Philosophy and Practice,* 396- 403.

146. Owolabi, H. A. et al. (2011). Use of Electronic Information Sources (EIS) by faculty members in Nigerian universities. *International Journal of Library science,* 4 (A11).

147. Oyelude, Adetoun A. & Ola, C. O. (2008). Budgeting for library technical services in an electronic age. *Library Philosophy & Practice*, 10 (2), 1-8.

148. Palmer, Kristi L, Dill, Emily & Christie, Charlene. (2009). Where there's a will there's a way?: Survey of academic librarian attitudes about open access. *College Research Library,* 70, 315-335.

149. Panigrai, Pijushkanti & Jana, Lakshmikanta*. (2010).* Job satisfaction among non-government college librarians in West Bengal: a study. *SRELS Journal of Information Management*, 47 (5), 569-584.

150. Parvathamma, N. & Reddy, Shanker. (2009). Use of information resources and services in public libraries: a case of Bidar District, Karnataka State, India. *Annals of Library and Information Studies,* 56, 249-254.

151. Pegrum, Mark & Kiel, Ralph. (2011). Changing the way we talk : Developing librarians' competence in emerging technologies through a structured program. *College Research Library,* 72, 583-598.

152. Pollaris, Yannis A & Macris, Aristomenis. (2008). Strategic planning for information resources: Enhancing managers' participation through ontology – based modelling. *International Journal of Technology Management*, 1-23.

153. Poppel, H. (1978). *Portfolio on Information Resource Management: The Process*. Data Processing Management. Auerch Publishers.

154. Price, Apryl C. (2009*).* How to make a dollar out of fifteen cents: tips for electronic collection development. *Collection Building*, 28 (1), 31-34.

155. Ramesha & Kumbar, B.D. Performance evaluation of Karnataka state university library resources and services : A librarian's approach. *Journal of Educational Media & Library Sciences*. 41 (3), 299-314.

156. Rathswohl, Eugene J. (1990). Information Resource Management and the end user: Some implications for education. *Information Resources Management Journal*, 3 (3), 6.

157. Rawat, K. S. (2003). Technology and tips for paper-to-CD/DVD-ROM conversion of selected collection in academic libraries. *Annals of Library and Information Studies*, 50, 130-133.

158. Rehman, Shafiq Ur. (2013). Service quality assessment in University Libraries of Pakistan. *Canadian Journal of Information & Library Sciences*, 37 (1), 59-80.

159. Sahu, Ashok Kumar. (2006). Perceptions of service quality in an academic library: A case study. *Journal of Services Research,* 6 (1).

160. Sahu, N.K., Swain, Dillip K & Rout, Madhusmita. (2012). Diminishing use of library services by the students of an engineering institution in Odisha, India. *International Research: Journal of Library & Information Science*, 2 (2), 184-195.

161. Sakalaki, Maria & Kazi, Smaragda. (2009). Valuing and representing information: the paradox of undervaluing information and overvaluing information producers. *Journal of Information Science,* 35, 153-164.

162. Sandhu, Harmanpreet Singh & Jalandhar, Daviet. (2012). Use of open access resources by the engineering students of Punjab (India). *International Journal of Library and Information Science*, 4(1), 10-15.

163. Savolainen, Reijo. (2010). Source preference criteria in the context of everyday projects: Relevance judgments made by prospective home buyers. *Journal of Documentation*, 66 (1), 70 – 92.

164. Schad, Jasper G. (1978). Allocating materials budgets in institutions of higher education. *Journal of Academic Librarianship*, 3 (6), 328-332.

165. Schrage, John F. (1981). Information Resource Management theory training. ACM '81. *Proceedings of the ACM '81 conference Proceeding*. New York, 275-276.

166. Scudamore, Patricia & Catt, Hilton. (1997). *Solving skills shortages: how to retain and recruit skilled people*. London: Lynne Rienner Publishers.

167. Selig, Gad J. (1982). Approaches to strategic planning for Information Resource Management (IRM) in multinational corporations. *MIS Quarterly,* 6 (2), 33-45.

168. Selsky, D. (1989). Academic libraries: Increasingly funded by private sources. *Library Journal*, 114 (13), 38.

169. Shank, John D. & Dewald, Nancy H. (2012). Academic library administrators' perceptions of four instructional skills. *College Research Library,* 73, 78-93.

170. Shi, Xi & Levy, Sarah. (2005). A theory-guided approach to library services assessment.

171. Silverman, Emily. *(2010).* Beyond luck and money A place for books: fundraising for collections. *Bottom Line: Managing Library* Finances, 23 (2), 70-73.

172. Sing, Y.K & Bajpai, R. B. (2010). *Research Methodology*. New Delhi: A.P.H Publishing Corporation.

173. Singh, Rita & Sharma, Rajesh. (2010). Relevance of library and information resource centre in pharmaceutical research development in context of new

digital era. *International Journal of Library and Information Science*, 2(3), 35–40.

174. Singh, Rupinder. (2011). Globalisation of information sources & services. *International Journal of Information Dissemination and Technology,* 1 (2), 101-105.

175. Sornam, S. Ally. & Muruganantham, T. (2006). Adjustment problems: a study among college librarians. *SRELS Journal of Information Management*, 43 (2), 201-214.

176. Sprehe, J.Timothy (1987). OMB Circular No. A-130, the management of federal information resources: Its origins and impact. *Government Information Quarterly*, 4 (2), 189–196.

177. Sprehe, J.Timothy. (2010). Integrating records management into Information Resources Management in U.S. Government agencies. *Government Information Quarterly*, 17(1), 13-26.

178. Stear, Edward B & Wecksell, Joel. (1997). Information Resource Center Management. *Bulletin of the American Society for Information Science.* 23, 4.

179. Stephenson, Stephen V. & Sage, Andrew P. (2007). Information and knowledge perspectives in systems engineering and management for innovation and productivity through enterprise resource planning. *Information Resources Management Journal,* 20 (2), 30.

180. Sturges, Paul, Teng, Vincent & Iliffe, Ursula. (2001). User privacy in the digital library environment: A matter of concern for information professionals. *Library Management,* 22 (8/9), 364- 371.

181. Sumner, Mary. (1934). Information security threats: a comparative analysis of impact, probability, and preparedness. *Information Systems Management,* 26, 2–12.

182. Sunil, Adupa & Kumar, K. Praveen. (2009). Preservation of library materials: problems and perspective. *DESIDOC-Journal of Library & Information Technology*, 29 (4), 37-40.

183. Sutton, Lynn, Bazirjian, Rosann & Zerwas, Stephen. (2009). Library service perceptions: A study of two universities. *College Research Library,* 70, 474-496.

184. Swanepoel, Marinus, Toit, Adeline Du & Van Brakel, Pieter A. (2001). Management of information technology in academic information services. *ASLIB Proceedings,* 53 (6), 224 – 237.

185. Synnott, W.R. & Gruber. W.H. (1981). *Information Resource Management*. New York: John Wiley and Sons.

186. Tag, Sylvia G. (2004). A library instruction survey for transfer students: Implications for library services. *Journal of Academic Librarianship*, 30 (2), 102-108.

187. Tallon, Paul P. & Scannell, Richard. (2007). Information life cycle management. *Communications of the ACM,* 50 (11), 65-70.

188. Tarafdar, Monideepa & Gordon, Steven R. (2007). Understanding the influence of information systems competencies on process innovation: A resource-based view. *The Journal of Strategic Information Systems*, 16 (4), 353–392.

189. Tim, Bryce. (2007). What is Information Resource Management?: An overview of a concept for getting your IT house in order. *AIIM E - Doc Magazine,* 21 (3), 46 – 47.

190. Trauth E.M. (1989). The evolution of Information Resource Management. *Information and Management*. 16, 203-208.

191. Tricker, R.I. (1988). Information Resource Management: A cross-cultural perspective. *Information and Management*, 15(1), 37-46.

192. Tyagi, Sunil. (2011). Usage of electronic information sources and services by users at Mahatma Gandhi central library IIT Roorkee: A case study. *International Journal of Library science,* 4, 11.

193. Tyckoson, David A. (2011). Issues and trends in the management of reference services: A historical perspective. *Journal of Library Administration*, 51 (3), 259-278.

194. University Grants Commission (UGC). Retrieved December 12, 2013, from http://www.ugc.ac.in/pub/ heindia.pdf.

195. Veiga, A. Da & Loff, J. H. P. E. (2007). An Information security governance framework. *Information Systems Management,* 24, 361–372.

196. Walters, William H. (2008). A fund allocation formula based on demand, cost, and supply. *Library Quarterly*, 78 (3), 303-314.

197. Wang, Mei-Ling & Chi-Tzu, Liu . (2009). A study of the core competencies for Taiwan's librarians from the library values perspective. *Journal of Library and Information Science Research*, 4 (1), 27-68.

198. Webster, Judy. (1993). Allocating library acquisitions budgets in an era of declining or static funding. *Journal of Library Administration*, 19 (2), 57.

199. Widen-Wulff, Gunilla & Suomi , Reima. (2007). Utilization of information resources for business success: The knowledge sharing model. *Information Resources Management Journal*, 20 (1), 22.

200. Willard, Nick. (1993). Information Resources Management, *ASLIB Information*, 21, 5.

201. Willcocks, Leslie & Whitley, V. (2009). Developing the information and knowledge agenda in information systems: Insights from philosophy. *The Information Society*, 25, 190–197.

202. Williams, Byron K., Eaton, Mitchell J. & Breininger, David R. (2011). Adaptive resource management and the value of information. *Ecological Modelling,* 222 (18), 3429–3436.

203. Willow**,** Charles C. (2006). A conceptual framework for agent-based Information Resource Management. *Computer Science,* 171-182.

204. Winston, Mark D. & Dunkley, Lisa. (2002). Leadership competencies for academic librarians: The importance of development and fund-raising. *College Research Library,* 63, 171-182.

205. Wood, Charles Cresson. (1983). Enhancing information security with the Information Resource Management approach. *Computers & Security*, 2(3), 223–229.

206. Xu, Q & Meng, X. (2009). International Federation for Information Processing (IFIP), 295.

207. Yannis A, Pollaris & Aristomenis, Macris. (2008). Strategic planning for information resources: Enhancing managers' participation through ontology – based modelling. *International Journal of Technology Management,* 1-23.

208. Zhang, Chengyu. et al. (2003). Network information resources management system based on knowledge mining. *Online Information Review,* 27 (2), 129.

Appendix A

From

A. Victor,
Research Scholar,
P.G and Research Department of Library and Information Science,
Bishop Heber college, Tiruchirappalli.

Dear Sir/ Madam,

Sub: Request to fill-up the questionnaire for my Research-Reg.

I, A. Victor is doing part-time Ph. D under the Guidance of **Dr. V. Geetha**, Associate Professor, DLIS, Bishop Heber College , Tiruchirappalli. My research topic is "**Information Resource Management: an evaluative study of libraries in affiliated colleges of Bharathidasan university, Tiruchirappalli**".

I request you to give your responses to the enclosed questionnaire. I assure that the data provided by you will be used for the research purposes only and would be kept confidential. I solicit your help and co-operation in this regard

Thanking you,

Yours faithfully

(A.VICTOR)

INFORMATION RESOURCE MANAGEMENT: AN EVALUATIVE STUDY OF LIBRARIES IN AFFILIATED COLLEGES OF BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI

For Librarian

Part I

1. Institutional Details

1.1 Name of the Institution :

1.2 Year of established :

1.3 Please indicate the type of your institution

a. Govt. : Autonomous □ Non Autonomous □

b. Aided : Autonomous □ Non Autonomous □

c. Self financing : Autonomous □ Non Autonomous □

1.4 Name of the Library (if any) :

1.5 Name of the Librarian (optional) :

1.6 Age :

1.7 Sex : Male □ Female □

1.8 Experience :

1.9 Educational & Professional Qualifications :

1.10 Designation : Librarian / Librarian(SS) / Librarian (SG)

1.11 Courses offered : U.G □ P.G □ M. Phil □ Ph.D. □

1.12 Location of the college : Rural □ Semi Urban □ Urban □

Part II

2.1. Collection of Information Sources

2.1.1 Collection Development policy : Yes ☐ No ☐

If yes, Policy Format : Written☐ Unwritten (Oral) ☐

2.1. 2 Consultation of Book selection tools

a. Bibliographies Yes / No
b. Books in print Yes / No
c. Publishers & Book Sellers Catalogue Yes / No
d. Guides to the subject List Yes / No
e. Web OPAC / Others Library Catalogue Yes / No

2.1.3. Book Selection based on

a. Recommendations from HODs Yes / No
b. Recommendations from Faculty Yes / No
c. Recommendations from Library staff Yes / No
d. Suggestions from students Yes / No
e. Recommendations from Management Yes / No

2.1.4 Method of Acquiring Information sources
(A – Always; O – Often; S – Sometimes; R – Rarely; N – Never)

a. By standing vendor A / O / S / R / N
b. By visiting to Book shop A / O / S / R / N
c. By inviting book sellers to bring the books to the Library A / O / S / R / N
d. By approval method A / O / S / R / N
e. By Quotations A / O / S / R / N
f. By organizing book exhibitions A / O / S / R / N
g. By visiting book fairs / festivals / exhibitions A / O / S / R / N

2.1.5 Mode of Communication to acquisition of information sources.

S. No.	Parameter	Always	Often	Rarely
a.	Face to face			
b.	Postal/ Courier			
c.	Telephone/ Cellphone			
d.	Fax			
e.	Email			

2.1.6 Collection Development Fund

a. Highly Adequate ☐ b. Adequate ☐ c. Inadequate ☐

2.1.7 Growth of information sources (Collection)

a. Highly improved ☐ b. Improved ☐
c. Fairly improved ☐ d. Not improved ☐
e. Highly not improved ☐

2.1.8 Collection of Information sources. (No. of Volumes)

S.No.	Sources	Number
1	**Books**	
	Textbooks(if any)	
2	Reference Sources	
3	**Periodicals (Printed)**	
	I News papers	
	ii Magazine	
	iii Journals	
	iv Back Volumes	
4	**Access of E-resources**	
	1 Subscription	
	a Individual	
	i. E-book	
	ii. E-journal	
	iii. Databases	
	b. Consortia	
	i. E-book	
	ii. E-journal	
	iii. Databases	
	2 Open source	

2.1. 9 Barriers to Acquire Information sources.

S. No.	Barriers	Always	Often	Sometimes	Rarely	Never
1	Policy of the Institution					
2	Inadequate funds					
3	Lack of co-operation					
4	Lack of Books Selection Sources					
5	Lack of equipments					
6	Language barriers					

2.2. Organization of Information sources

2.2. 1. Systems followed in the Library

a.	Type of Access	:	Open / Closed
b.	Classification System	:	CC/DDC/UDC /Local
c.	Cataloguing System	:	Local/CCC/AACR/ OPAC/ Web OPAC
d.	Charging System	:	Register/Ticket/Automated
e.	Register System	:	Register / Automated
f.	Bar code	:	Yes / No
g.	Stock Verification Method	:	______________________________
	Frequency	:	Regularly/ Occasionally / Rarely/ Never
h.	Automation System	:	In – house developed /Commercial / Open source/ Not automated.

2.2. 2 Management of information source collection

S. No.	Description	More effective	Effective	Neutral	Less effective	More Less effective
1	Planning and Policy Making					
2	Collection analysis					
3	Collection Maintenance					
4	Budgetary Control					
5	Liaison (User, Publisher, Management, Librarian)					
6	Resource Sharing policy & method					

2.2.3 Method of providing Services

S. No.	Services	More effective	Effective	Neutral	Less effective	More less effective
1	Lending service					
2	Reference service					
3	Referral service					
4	Inter Library Loan service					
5	Consortium (UGC Info net / N-List) service					
6	Online service					
7	Current Awareness Service (CAS)					
8	Reprography service					

2.3. Security Management

2.3.1. Problems in Information source collection in Library

S. No.	Barriers	Yes	No
1	Book Theft		
2	Non return of Library materials		
3	Tearing pages		
4	Mutilation of resources		
5	Torn book spine		
6	Misplacement and displacement		
7	Using someone ID to borrow		
8	Borrowing books for friends and family members		
9	Environmental control (Temperature and Climate)		
10	Biological pests (Insects or worms)		

2.3.2. Type of security measures are taken in library

S. No.	Types	Yes	No
1	Installation of Electronic security systems (RFID)		
2	Manual Security		
3	Checking Users ID card before and after they are allowed to access the Library.		
4	Engaging staff to vigilance in the reading room.		
5	Daily shelving and rectification		
6	Discouraging the users to get books for their friends and relatives		

2.3.3. Preservation of Information sources

S. No.	Methods	Yes	No
1	Utilization of professional preservators /conservators		
2	Cleaning and Dusting		
3	Good ventilation		
4	Proper shelving		
5	Training to users and library staff		
6	Humidity measures		
7	Digital Preservation		

2.4. Financial Resources

2.4. 1 Sources of Finance

S. No.	Sources	Yes	No
1	State Government		
2	UGC		
3	Management		
4	Fund from agencies		
5	Users Fee		

2.5 Human Resources

2.5.1 No. of Library staffs (including yourself)

Category	Professional	Semi Professional	Non Professional
Aided			
Self. Financing			

2.5.2 Do you have attended any training programme? Yes □ No □

If yes, how much it is useful for managing of information resources? ------------------

2.6 Self appraisal of IRM skills among librarians

2.6 .1 Requirement of Information resource Management skills based on previous Experience

S. No.	Skills	Good	Moderate	Poor
1	Collection Management skill			
2	Collection development skill			
3	ICT skill			
4	Service skill			
5	Preservation skill			
6	Maintenance skill			
7	Record management skill			
8	Budget skill			
9	Negotiation skill			
10	Liaison skill			

2.6.2 Do you evaluate the collection? **Yes** ☐ **No** ☐

If yes,

S. No.	Methods	Most Frequently use	Frequently use	Neutral	Never	Almost Never
1	User survey					
2	Personal Communication					
3	Circulation Statistics					
4	User statistics					
5	Feedback through Email					

2.6.3 Give your suggestions to improve the Information Resource Management (Regarding Planning, Acquisition, Organization, Operation, Service, Finance etc), (if any)

Appendix B

User Questionnaire

INFORMATION RESOURCE MANAGEMENT: AN EVALUATIVE STUDY OF LIBRARIES IN AFFILIATED COLLEGES OF BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI

Part- I Demographic Details

1.1. Name of the Institution :

1.2. Type of the Institution : Government ☐
Govt. Aided ☐
Self finance ☐

1.3. Name (Optional) :

1.4. Age : 21 and Below ☐
22- 25 ☐
Above25 ☐

1.5. Gender : Male ☐
Female ☐

1.6. Marital Status : Married ☐
Un married ☐

1.7. Designation :

1.8. Discipline : Arts ☐
Science ☐

1.9. Educational Qualification :

1.10. Nativity : Rural ☐
Semi Urban ☐
Urban ☐

Part- II

2.1 Frequency Use of Library :

a. Daily ☐ b. Regularly ☐ c. Rarely ☐

2.2 Purpose of library visit

S. No.	Purpose	Always	Sometime	Rarely
a	General reading			
b	Preparing class notes			
c	Borrowing materials			
d	Reading Newspaper			
e	Higher education and Placements			
f	Preparing Research papers			

2.3 Mode of accessing reading materials

a. Direct access ☐ b. Library catalogues ☐ c. Library staff ☐

2.4 Level of staff support

a. Always ☐ b. Sometimes ☐ c. Never ☐

2.5 Usefulness of information sources

S. No.	Sources	Always	Some times	Never
1	Text Books			
2	General books			
3	Newspapers/Magazines			
4	Journals			
5	Reference sources			
6	E-Resources			
7	Thesis/ Reports / Dissertations			

2.6. Level of satisfaction of Information Resources.

S. No.	Area of Satisfaction	Highly Satisfied	Satisfied	Neutral	Dis Satisfied	Highly Dis Satisfied
1	Adequacy of information sources					
2	Collection quality					
3	Classification of sources					
4	Cataloguing of sources					
5	Arrangement of information sources					
6	Infrastructure facilities					
7	Maintenance of library					
8	Working Hours					
9	Service quality					
10	Staff attitude					

2.7. Please indicate the Order of preferences (importance) of the following statements in terms of choosing your major information source.

S. No.	Area of Importance	Highly preferred	Preferred	Neutral	Not preferred	Highly not preferred
A.	**Information sources**					
1	Right selection of information sources					
2	Relevancy of sources					
3	Print sources					
4	Electronic sources					
5	Fast access of information sources					

S. No.	Area of Importance	Highly preferred	Preferred	Neutral	Not preferred	Highly not preferred
B. Facilities						
6	Technical assistance					
7	Library hours					
8	Convenience of library system					
9	Overall performance					
10	Solving of academic problems					
C. Human resources						
11	Library staff Co-operation					
12	Motivational factor					

2.8 If the information source is not available, how often do you try to seek them from off site?

a. Most of the time ☐ b. Some time ☐ c. Never ☐

2.9. How do you rate your overall skills in locating, using and evaluating information sources available in libraries ?

a. Good ☐ b. Average ☐ c. Poor ☐

2.10. If you have any experienced difficulty in using library services, what specific services do you find difficult to use?

S. No.	Difficulties	Always	Sometimes	Never
A.	Lending service			
B.	Reference service			
C.	Referral service			
D.	Inter library loan			
F.	Consortium service			
G.	Online service			
H.	Current Awareness Service (CAS)			
I.	Reprography service			
J.	Cataloguing service			

3. Suggestions for better IRM in Libraries (Regarding Collection, Access, Infrastructure, Service, Attitude of the Staff)

Appendix C

LIBRARY VISIT

Table A 1.1

Purpose of Library Visit Vs Types of Institution

S. No.	Description	Government n= 100				Government Aided n= 100				Self finance n= 200			
		A	S	RA	M	A	S	RA	M	A	S	RA	M
1	General reading	60 60%	31 31%	9 9%	1.49	60 60%	33 33%	7 7%	1.47	120 60%	61 30.5%	19 9.5%	1.50
2	Preparing class notes	65 65%	27 27%	8 8%	1.43	73 73%	22 22%	5 5%	1.32	137 68.5%	50 25%	13 6.5%	1.38
3	Borrowing books	58 58%	33 33%	9 9%	1.51	75 75%	22 22%	3 3.0%	1.28	131 65.5%	60 30%	9 4.5%	1.39
4	Reading newspaper	46 46%	45 45%	9 9%	1.63	55 55%	39 39%	6 6.0%	1.51	98 49%	89 44.5%	13 6.5%	1.58
5	Higher education and Placements	34 34%	46 46%	20 20%	1.86	45 45%	47 47%	8 8%	1.63	76 38%	96 48%	28 14%	1.76
6	Preparing research papers	28 28%	28 28%	44 44%	2.16	54 54%	27 27%	19 19%	1.65	81 40.5%	84 42%	35 17.5%	1.77

(A = Always; S= Sometimes; RA= Rarely; M= Mean)

Table A 1.2
Purpose of Library Visit Vs Discipline

S. No.	Description	Arts n = 167				Science n = 233			
		A	S	RA	M	A	S	RA	M
1	General reading	103 61.7%	50 29.9%	14 8.4%	1.47	137 58.8%	75 32.2%	21 9%	1.50
2	Preparing class notes	122 73.1%	37 22.2%	8 4.8%	1.32	153 65.7%	62 26.6%	18 7.7%	1.42
3	Borrowing books	105 62.9%	50 29.9%	12 7.2%	1.44	159 68.2%	65 27.9%	9 3.9%	1.36
4	Reading newspaper	72 43.1%	81 48.5%	14 8.4%	1.65	127 54.5%	92 39.5%	14 6%	1.52
5	Higher education and Placements	67 40.1%	78 46.7%	22 13.2%	1.73	88 37.8%	111 47.6%	34 14.6%	1.77
6	Preparing research papers	62 37.1%	59 35.3%	46 27.5%	1.90	101 43.3%	80 34.3%	52 22.3%	1.79

(A = Always; S= Sometimes; RA= Rarely; M= Mean)

USEFULNESS OF INFORMATION SOURCES
Table A 2.1
Usefulness of Information Sources Vs Gender

S. No.	Description	Male n = 151				Female n= 249			
		A	S	N	M	A	S	N	M
1	Text books	121 80.1%	28 18.5%	2 1.3%	1.21	196 78.7%	48 19.3%	5 2%	1.23
2	General books	90 59.6%	48 31.8%	13 8.6%	1.49	128 51.4%	103 41.4%	18 7.2%	1.56
3	News papers / Magazines	106 70.2%	30 19.9%	15 9.9%	1.40	166 66.7%	62 24.9%	21 8.4%	1.42
4	Journals	78 51.7%	66 43.7%	7 4.6%	1.53	131 52.6%	100 40.2%	18 7.2%	1.55
5	Reference source	83 55%	54 35.8%	14 9.3%	1.54	152 61%	83 33.3%	14 5.6%	1.45
6	e- resources	38 25.2%	92 60.9%	21 13.9%	1.89	69 27.7%	145 58.2%	35 14.1%	1.86
7	Thesis, Reports and Dissertation	16 10.6%	100 66.2%	35 23.2%	2.13	43 17.3%	146 58.6%	60 24.1%	2.07

(A = Always, S = Some times, N = Never, M = Mean, R= Rank)

Table A 2.2
Usefulness of Information Sources Vs Discipline

S. No.	Description	Arts n= 167				Science n= 233			
		Always	Sometimes	Never	Mean	Always	Sometimes	Never	Mean
1	Text books	130 77.8%	34 20.4%	3 1.8%	1.24	187 80.3%	42 18%	4 1.7%	1.21
2	General books	80 47.9%	75 44.9%	12 7.2%	1.59	138 59.2%	76 32.6%	19 8.2%	1.49
3	News papers / Magazines	105 62.9%	45 26.9%	17 10.2%	1.47	167 71.7%	47 20.2%	19 8.2%	1.36
4	Journals	82 49.1%	74 44.3%	11 6.6%	1.57	127 54.5%	92 39.5%	14 6%	1.52
5	Reference source	92 55.1%	62 37.1%	13 7.8%	1.53	143 61.4%	75 32.2%	15 6.4%	1.45
6	e- resources	42 25.1%	104 62.3%	21 12.6%	1.87	65 27.9%	133 57.1%	35 15%	1.87
7	Thesis, Reports and Dissertation	25 15%	103 61.7%	39 23.4%	2.08	34 14.6%	143 61.4%	56 24%	2.09

SATISFACTION OF INFORMATION RESOURCES

Table A 3.1

Satisfaction level of Information Resources Vs Gender

S. No.	Description	Male n = 151						Female n = 249					
		HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M
1	Adequacy of information sources	41 27.2%	74 49%	16 10.6%	18 11.9%	2 1.3%	2.11	72 28.9%	141 56.6%	11 4.4%	25 10%	0 0%	1.96
2	Collection quality	28 18.5%	89 58.9%	16 10.6%	16 10.6%	2 1.3%	2.17	51 20.5%	156 62.7%	22 8.8%	19 7.6%	1 0.4%	2.05
3	Classification of sources	26 17.2%	94 62.3%	19 12.6%	11 7.3%	1 0.7%	2.12	46 18.5%	153 61.4%	24 9.6%	25 10%	1 0.4%	2.12
4	Cataloguing of sources	21 13.9%	81 53.6%	26 17.2%	23 15.2%	0 0%	2.34	35 14.1%	145 58.2%	33 13.3%	34 13.7%	2 8%	2.29
5	Arrangement of information sources	35 23.2%	87 57.6%	8 5.3%	20 13.2%	1 0.7%	2.11	48 19.3%	162 65.1%	19 7.6%	20 8%	0 0%	2.04
6	Infrastructure facility	32 21.2%	90 59.6%	10 6.6%	19 12.6%	0 0%	2.11	59 23.7%	145 58.2%	21 8.4%	22 8.8%	2 0.8%	2.05
7	Maintenance of library	44 29.1%	79 52.3%	14 9.3%	14 9.3%	0 0%	1.99	77 30.9%	138 55.4%	14 5.6%	20 8%	0 0%	1.91
8	Working hours	24 15.9%	105 69.5%	11 7.3%	11 7.3%	0 0%	2.06	42 16.9%	148 59.4%	32 12.9%	25 10%	2 8%	2.18
9	Service quality	40 26.5%	94 62.3%	5 3.3%	12 7.9%	0 0%	1.93	59 23.7%	157 63.1%	19 7.6%	14 5.6%	0 0%	1.95
10	Staff attitude	43 28.5%	90 59.6%	10 6.6%	7 4.6%	1 0.7%	1.89	64 25.7%	163 65.5%	10 4%	11 4.4%	1 0.4%	1.88

(HS = Highly Satisfied, S= Satisfied, N = Neutral, DS = Dis Satisfied, HDS = Highly dis Satisfied, M = Mean)

Table A 3.2
Satisfaction level of Information Resources Vs Types of Institution

S. No.	Description	Government n = 100						Government Aided n = 100						Self finance n = 200					
		HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M
1	Adequacy of information sources	22 22%	55 55%	8 8%	14 14%	1 1%	2.17	25 25%	58 58%	8 8%	8 8%	1 1%	1.92	66 33%	102 51%	11 5.5%	21 10.5%	0 0%	1.98
2	Collection quality	10 10%	62 62%	13 13%	13 13%	2 2%	2.35	21 21%	67 67%	6 6%	5 5%	1 1%	1.85	48 24%	116 58%	19 9.5%	17 8.5%	0 0%	2.06
3	Classification of sources	14 14%	64 64%	12 12%	8 8%	2 2%	2.20	14 14%	68 68%	6 6%	12 12%	0 0%	1.97	44 22%	115 57.5%	25 12.5%	16 8%	0 0%	2.14
4	Cataloguing of sources	9 9%	52 52%	20 20%	17 17%	2 2%	2.51	17 17%	53 53%	14 14%	16 16%	0 0%	2.11	30 15%	121 60.5%	25 12.5%	24 12%	0 0%	2.28
5	Arrangement of information sources	18 18%	61 61%	14 14%	6 6%	1 1%	2.11	12 12%	67 67%	5 5%	16 16%	0 0%	2.23	53 26.5%	121 60.5%	8 4%	18 9%	0 0%	2.00
6	Infrastructure facility	23 23%	52 52%	6 6%	17 17%	2 2%	2.23	29 29%	56 56%	7 7%	8 8%	0 0%	1.85	39 19.5%	127 63.5%	18 9%	16 8%	0 0%	2.07
7	Maintenance of library	26 26%	51 51%	10 10%	13 13%	0 0%	2.1	34 34%	50 50%	7 7%	9 9%	0 0%	1.77	61 30.5%	116 58.0%	11 5.5%	12 6%	0 0%	1.92
8	Working hours	16 16%	64 64%	13 13%	7 7%	0 0%	2.11	16 16%	62 62%	8 8%	12 12%	2 2.0%	2.12	34 17%	127 63.5%	22 11%	17 8.5%	0 0%	2.16
9	Service quality	28 28%	49 49%	13 13%	10 10%	0 0%	2.05	17 17%	66 66%	8 8%	9 9%	0 0%	2.01	54 27%	136 68%	3 1.5%	7 3.5%	0 0%	1.87
10	Staff attitude	26 26%	60 60%	8 8%	5 5%	1 1%	1.95	22 22%	67 67%	5 5%	5 5%	1 1.0%	1.91	59 29.5%	126 63%	7 3.5%	8 4%	0 0%	1.85

(HS =Highly Satisfied, S = Satisfied, N =Neutral, DS = Dis Satisfied, HDS = Highly dis Satisfied, M= Mean)

Table A 3.3
Satisfaction level of Information Resources Vs Nativity

S. No.	Description	Rural n = 191						Semi urban n = 144						Urban n = 65					
		HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M
1	Adequacy of information sources	55 28.8%	102 53.4%	10 5.2%	22 11.5%	2 1%	2.03	42 29.2%	77 53.5%	8 5.6%	17 11.8%	0 0%	2.00	16 24.6%	36 55.4%	9 13.8%	4 6.2%	0 0%	2.02
2	Collection quality	39 20.4%	109 57.1%	20 10.5%	20 10.5%	3 1.6%	2.16	26 18.1%	98 68.1%	10 6.9%	10 6.9%	0 0%	2.03	14 21.5%	38 58.5%	8 12.3%	5 7.7%	0 0%	2.06
3	Classification of sources	32 16.8%	115 60.2%	22 11.5%	20 10.5%	2 1%	2.19	26 18.1%	93 64.6%	12 8.3%	13 9.0%	0 0%	2.08	14 21.5%	39 60.0%	9 13.8%	3 4.6%	0 0%	2.02
4	Cataloguing of sources	28 14.7%	108 56.5%	28 14.7%	27 14.1%	0 0%	2.28	20 13.9%	77 53.5%	18 12.5%	27 18.8%	2 1.4%	2.40	8 12.3%	41 63.1%	13 20%	3 4.6%	0 0%	2.17
5	Arrangement of information sources	41 21.5%	117 61.3%	11 5.8%	21 11%	1 0.5%	2.08	27 18.8%	93 64.6%	9 6.3%	15 10.4%	0 0%	2.08	15 23.1%	39 60.0%	7 10.8%	4 6.2%	0 0%	2.00
6	Infrastructure facility	44 23.0%	109 57.1%	14 7.3%	24 12.6%	0 0%	2.09	29 20.1%	91 63.2%	13 9.0%	9 6.3%	2 1.4%	2.06	18 27.7%	35 53.8%	4 6.2%	8 12.3%	0 0%	2.03
7	Maintenance of library	55 28.8%	109 57.1%	17 8.9%	10 5.2%	0 0%	1.91	43 29.9%	77 53.5%	9 6.3%	15 10.4%	0 0%	1.97	23 35.4%	31 47.7%	2 3.1%	9 13.8%	0 0%	1.95
8	Working hours	32 16.8%	122 63.9%	20 10.5%	15 7.9%	2 1.0%	2.13	23 16%	91 63.2%	14 9.7%	16 11.1%	0 0%	2.16	11 16.9%	40 61.5%	9 13.8%	5 7.7%	0 0%	2.12
9	Service quality	41 21.5%	126 66%	12 6.3%	12 6.3%	0 0%	1.97	31 21.5%	95 66%	5 3.5%	13 9%	0 0%	2	27 41.5%	30 46.2%	7 10.8%	1 1.5%	0 0%	1.72
10	Staff attitude	54 28.3%	118 61.8%	11 5.8%	8 4.2%	0 0%	1.86	32 22.2%	99 68.8%	5 3.5%	6 4.2%	2 1.4%	1.94	21 32.3%	36 55.4%	4 6.2%	4 6.2%	0 0%	1.86

(HS =Highly Satisfied, S = Satisfied, N =Neutral, DS = Dis Satisfied, HDS = Highly dis Satisfied, M= Mean)

Table A 3.4
Satisfaction level of Information Resources Vs Discipline

S. No.	Description	Arts n= 167						Science n= 233					
		HS	S	N	DS	HDS	M	HS	S	N	DS	HDS	M
1	Adequacy of information sources	50 29.9%	90 53.9%	6 3.6%	20 12%	1 0.6%	1.99	63 27.0%	125 53.6%	21 9%	23 9.9%	1 0.4%	2.03
2	Collection quality	40 24.0%	99 59.3%	13 7.8%	15 9.0%	0 0%	2.02	39 16.7%	146 62.7%	25 10.7%	20 8.6%	3 1.3%	2.15
3	Classification of sources	36 21.6%	100 59.9%	20 12%	10 6.0%	1 0.6%	2.04	36 15.5%	147 63.1%	23 9.9%	26 11.2%	1 0.4%	2.18
4	Cataloguing of sources	30 18.0%	83 49.7%	29 17.4%	24 14.4%	1 0.6%	2.30	26 11.2%	143 61.4%	30 12.9%	33 14.2%	1 0.4%	2.31
5	Arrangement of information sources	27 16.2%	111 66.5%	11 6.6%	18 10.8%	0 0%	2.12	56 24%	138 59.2%	16 6.9%	22 9.4%	1 0.4%	2.03
6	Infrastructure facility	44 26.3%	90 53.9%	15 9%	17 10.2%	1 0.6%	2.05	47 20.2%	145 62.2%	16 6.9%	24 10.3%	1 0.4%	2.09
7	Maintenance of library	52 31.1%	91 54.5%	10 6%	14 8.4%	0 0%	1.92	69 29.6%	126 54.1%	18 7.7%	20 8.6%	0 0%	1.95
8	Working hours	32 19.2%	105 62.9%	12 7.2%	16 9.6%	2 1.2%	2.11	34 14.6%	148 63.5%	31 13.3%	20 8.6%	0 0%	2.16
9	Service quality	49 29.3%	99 59.3%	10 6%	9 5.4%	0 0%	1.87	50 21.5%	152 65.2%	14 6.0%	17 7.3%	0 0%	1.99
10	Staff attitude	47 28.1%	103 61.7%	10 6%	5 3.0%	2 1.2%	1.87	60 25.8%	150 64.4%	10 4.3%	13 5.6%	0 0%	1.90

(HS =Highly Satisfied, S = Satisfied, N =Neutral, DS = Dis Satisfied, HDS = Highly dis Satisfied, M= Mean)

ORDER OF PREFERENCES GIVEN TO THE LIBRARY RESOURCES AMONG USERS

Table A 4.1

Order of Preferences given to the Library Resources among Users Vs Gender

S. No.	Description	Male n = 151						Female n = 249					
		HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M
A. Information sources													
1	Right selection of information sources	37 24.5%	95 62.9%	10 6.6%	9 6.0%	0 0%	1.94	60 24.1%	157 63.1%	24 9.6%	8 3.2%	0 0%	1.92
2	Relevancy of sources	43 28.5%	90 59.6%	8 5.3%	10 6.6%	0 0%	1.90	49 19.7%	156 62.7%	15 6%	29 11.6%	0 0%	2.10
3	Print sources	35 23.2%	91 60.3%	11 7.3%	14 9.3%	0 0%	2.03	47 18.9%	157 63.1%	25 10.0%	18 7.2%	2 0.8%	2.08
4	Electronic sources	9 6.0%	65 43%	29 19.2%	48 31.8%	0 0%	2.77	19 7.6%	97 39.0%	56 22.5%	73 29.3%	4 1.6%	2.78
5	Fast access of information sources	34 22.5%	85 56.3%	15 9.9%	17 11.3%	0 0%	2.10	40 16.1%	155 62.2%	22 8.8%	32 12.9%	0 0%	2.18
B. Facilities													
6	Technical assistance	32 21.2%	94 62.3%	6 4%	19 12.6%	0 0%	2.08	39 15.7%	152 61%	38 15.3%	18 7.2%	2 0.8%	2.16
7	Library hours	28 18.5%	102 67.5%	10 6.6%	11 7.3%	0 0%	2.03	42 16.9%	153 61.4%	27 10.8%	27 10.8%	0 0%	2.16
8	Convenience of library system	27 17.9%	94 62.3%	16 10.6%	14 9.3%	0 0%	2.11	48 19.3%	163 65.5%	15 6%	22 8.8%	1 0.4%	2.06
9	Overall performance	38 25.2%	95 62.9%	3 2.0%	15 9.9%	0 0%	1.97	55 22.1%	166 66.7%	11 4.4%	17 6.8%	0 0%	1.96
10	Solving of academic problems	23 15.2%	106 70.2%	10 6.6%	12 7.9%	0 0%	2.07	51 20.5%	161 64.7%	21 8.4%	16 6.4%	0 0%	2.01

S. No.	Description	Male n = 151						Female n = 249					
		HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M
C. Human resources													
11	Library staff co-operation	44 29.1%	89 58.9%	8 5.3%	10 6.6%	0 0%	1.89	75 30.1%	157 63.1%	7 2.8%	10 4%	0 0%	1.81
12	Motivational factor	39 25.8%	92 60.9%	4 2.6%	16 10.6%	0 0%	1.98	68 27.3%	152 61.0%	13 5.2%	16 6.4%	0 0%	1.91

(HP = Highly preferred; P = Preferred; N = Neutral; NP = Not preferred; HNP = Highly not preferred)

Table A 4.2

Order of Preferences given to the Library Resources among Users Vs Types of the Institution

S. No.	Description	Government n= 100						Government Aided n= 100						Self finance n= 200					
		HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M
A. Information sources																			
1	Right selection of information sources	17 17%	64 64%	17 17%	2 2%	0 0%	2.04	21 21%	64 64%	8 8%	7 7%	0 0%	2.01	59 29.5%	124 62%	9 4.5%	8 4%	0 0%	1.83
2	Relevancy of sources	22 22%	59 59%	6 6%	13 13%	0 0%	2.10	31 31%	58 58%	4 4%	7 7%	0 0%	1.87	39 19.5%	129 64.5%	13 6.5%	19 9.5%	0 0%	2.06
3	Print sources	19 19%	65 65%	12 12%	4 4%	0 0%	2.01	13 13%	56 56%	15 15%	15 15%	1 1%	2.35	50 25%	127 63.5%	9 4.5%	13 6.5%	1 0.5%	1.94
4	Electronic sources	10 10%	45 45%	15 15%	27 27%	3 3%	2.68	10 10%	45 45%	16 16%	29 29%	0 0%	2.64	8 4%	72 36%	54 27%	65 32.5%	1 0.5%	2.90
5	Fast access of information sources	12 12%	66 66%	10 10%	12 12%	0 0%	2.22	23 23%	54 54%	3 3%	20 20%	0 0%	2.20	39 19.5%	120 60%	24 12%	17 8.5%	0 0%	2.10
B. Facilities																			
6	Technical assistance	15 15%	61 61%	16 16%	7 7%	1 1%	2.18	12 12%	65 65%	9 9%	14 14%	0 0%	2.25	44 22%	120 60%	19 9.5%	16 8%	1 0.5%	2.05
7	Library hours	16 16%	63 63%	12 12%	9 9%	0 0%	2.14	21 21%	60 60%	6 6%	13 13%	0 0%	2.11	33 16.5%	132 66%	19 9.5%	16 8%	0 0%	2.09
8	Convenience of library system	14 14%	58 58%	15 15%	12 12%	1 1%	2.28	15 15%	71 71%	3 3%	11 11%	0 0%	2.10	46 23%	128 64%	13 6.5%	13 6.5%	0 0%	1.97
9	Overall performance	19 19%	66 66%	7 7%	8 8%	0 0%	2.04	27 27%	61 61%	0 0%	12 12%	0 0%	1.97	47 23.5%	134 67%	7 3.5%	12 6%	0 0%	1.92
10	Solving of academic problems	16 16%	67 67%	12 12%	5 5%	0 0%	2.06	21 21%	70 70%	2 2%	7 7%	0 0%	1.95	37 18.5%	130 65%	17 8.5%	16 8%	0 0%	2.06
C. Human resources																			
11	Library staff co-operation	34 34%	58 58%	3 3%	5 5%	0 0%	1.79	26 26%	64 64%	5 5%	5 5%	0 0%	1.89	59 29.5%	124 62%	7 3.5%	10 5%	0 0%	1.84
12	Motivational factor	29 29%	57 57%	7 7%	7 7%	0 0%	1.92	20 20%	59 59%	7 7%	14 14%	0 0%	2.15	58 29%	128 64%	3 1.5%	11 5.5%	0 0%	1.84

(HP = Highly preferred; P = Preferred; N = Neutral; NP = Not preferred; HNP = Highly not preferred)

Table A 4.3

Order of Preferences given to the Library Resources among Users Vs Nativity

S. No.	Description	Rural n = 191						Semi urban n = 144						Urban n = 65					
		HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M	HP	P	N	NP	HNP	M
A. Information sources																			
1	Right selection of information sources	51 26.7%	116 60.7%	16 8.4%	8 4.2%	0 0%	1.90	34 23.6%	96 66.7%	8 5.6%	6 4.2%	0 0%	1.90	12 18.5%	40 61.5%	10 15.4%	3 4.6%	0 0%	2.06
2	Relevancy of sources	46 24.1%	112 58.6%	9 4.7%	24 12.6%	0 0%	2.06	26 18.1%	97 67.4%	10 6.9%	11 7.6%	0 0%	2.04	20 30.8%	37 56.9%	4 6.2%	4 6.2%	0 0%	1.88
3	Print sources	45 23.6%	117 61.3%	12 6.3%	16 8.4%	1 0.5%	2.01	18 12.5%	102 70.8%	10 6.9%	13 9.0%	1 0.7%	2.15	19 29.2%	29 44.6%	14 21.5%	3 4.6%	0 0%	2.02
4	Electronic sources	13 6.8%	78 40.8%	36 18.8%	61 31.9%	3 1.6%	2.81	10 6.9%	54 37.5%	33 22.9%	46 31.9%	1 0.7%	2.82	5 7.7%	30 46.2%	16 24.6%	14 21.5%	0 0%	2.60
5	Fast access of information sources	32 16.8%	120 62.8%	15 7.9%	24 12.6%	0 0%	2.16	25 17.4%	82 56.9%	16 11.1%	21 14.6%		2.23	17 26.2%	38 58.5%	6 9.2%	4 6.2%	0 0%	1.95
B. Facilities																			
6	Technical assistance	36 18.8%	116 60.7%	19 9.9%	20 10.5%	0 0%	2.12	24 16.7%	95 66.0%	13 9.0%	10 6.9%	2 1.4%	2.10	11 16.9%	35 53.8%	12 18.5%	7 10.8%	0 0%	2.23
7	Library hours	35 18.3%	123 64.4%	14 7.3%	19 9.9%	0 0%	2.09	23 16.0%	94 65.3%	14 9.7%	13 9.0%	0 0%	2.12	12 18.5%	38 58.5%	9 13.8%	6 9.2%	0 0%	2.14
8	Convenience of library system	38 19.9%	120 62.8%	14 7.3%	19 9.9%	0 0%	2.07	28 19.4%	97 67.4%	7 4.9%	11 7.6%	1 0.7%	2.03	9 13.8%	40 61.5%	10 15.4%	6 9.2%	0 0%	2.20
9	Overall performance	40 20.9%	124 64.9%	9 4.7%	18 9.4%	0 0%	2.03	33 22.9%	98 68.1%	4 2.8%	9 6.3%	0 0%	1.92	20 30.8%	39 60.0%	1 1.5%	5 7.7%	0 0%	1.86
10	Solving of academic problems	40 20.9%	120 62.8%	18 9.4%	13 6.8%	0 0%	2.02	22 15.3%	105 72.9%	8 5.6%	9 6.3%	0 0%	2.03	12 18.5%	42 64.6%	5 7.7%	6 9.2%	0 0%	2.08
C. Human resources																			
11	Library staff Co-operation	63 33.0%	116 60.7%	6 3.1%	6 3.1%	0 0%	1.76	38 26.4%	90 62.5%	6 4.2%	10 6.9%	0 0%	1.92	18 27.7%	40 61.5%	3 4.6%	4 6.2%	0 0%	1.89
12	Motivational factor	52 27.2%	116 60.7%	6 3.1%	17 8.9%	0 0%	1.94	40 27.8%	87 60.4%	6 4.2%	11 7.6%	0 0%	1.92	15 23.1%	41 63.1%	5 7.7%	4 6.2%	0 0%	1.97

(HP = Highly preferred; P = Preferred; N = Neutral; NP = Not preferred; HNP = Highly not preferred)

DIFFICULTIES IN USING LIBRARY SERVICES

Table A 5.1

Difficulties in Using Library Services Vs Gender

S. No.	Description	Male n = 151				Female n= 249			
		Always	Some times	Never	M	Always	Some times	Never	M
1	Lending service	25 16.6%	15 9.9%	111 73.5%	2.57	39 15.7%	34 13.7%	176 70.7%	2.55
2	Reference service	26 17.2%	20 13.2%	105 69.5%	2.52	46 18.5%	29 11.6%	174 69.9%	2.51
3	Referral service	30 19.9%	23 15.2%	98 64.9%	2.45	41 16.5%	36 14.5%	172 69.1%	2.53
4	Inter library loan	54 35.8%	40 26.5%	57 37.7%	2.02	75 30.1%	101 40.6%	73 29.3%	1.99
5	Consortium service	27 17.9%	61 40.4%	63 41.7%	2.24	49 19.7%	111 44.6%	89 35.7%	2.16
6	Online service	75 49.7%	35 23.2%	41 27.2%	1.77	111 44.6%	81 32.5%	57 22.9%	1.78
7	CAS	39 25.8%	15 9.9%	97 64.2%	2.38	75 30.1%	31 12.4%	143 57.4%	2.27
8	Reprography service	34 22.5%	19 12.6%	98 64.9%	2.42	60 24.1%	55 22.1%	134 53.8%	2.30
9	Cataloguing service	42 27.8%	37 24.5%	72 47.7%	2.20	80 32.1%	60 24.1%	109 43.8%	2.12

Table A 5.2
Difficulties in Using Library Services Vs Types of the Institution

S. No.	Description	Government n = 100				Government Aided n = 100				Self finance n = 200			
		Always	Sometimes	Never	Mean	Always	Sometimes	Never	Mean	Always	Sometimes	Never	Mean
1	Lending service	18 18%	10 10%	72 72%	2.54	15 15%	13 13%	72 72%	2.57	31 15.5%	26 13%	143 71.5%	0.75
2	Reference service	20 20%	6 6%	74 74%	2.54	16 16%	16 16%	68 68%	2.52	36 18%	27 13.5%	137 68.5%	0.78
3	Referral service	20 20%	16 16%	64 64%	2.44	17 17%	13 13%	70 70%	2.53	34 17%	30 15%	136 68%	0.77
4	Inter library loan	39 39%	35 35%	26 26%	1.87	31 31%	34 34%	35 35%	2.04	59 29.5%	72 36%	69 34.5%	0.80
5	Consortium service	23 23%	42 42%	35 35%	2.12	20 20%	47 47%	33 33%	2.13	33 16.5%	83 41.5%	84 42%	0.72
6	Online service	50 50%	36 36%	14 14%	1.64	44 44%	25 25%	31 31%	2.25	92 46%	55 27.5%	53 26.5%	0.84
7	CAS	34 34%	13 13%	53 53%	2.19	26 26%	9 9%	65 65%	1.99	54 27%	24 12%	122 61%	0.84
8	Reprography service	19 19%	16 16%	65 65%	2.46	27 27%	21 21%	52 52%	1.87	48 24%	37 18.5%	115 57.5%	0.83
9	Cataloguing service	31 31%	33 33%	36 36%	2.05	40 40%	21 21%	39 39%	2.39	51 25.5%	43 21.5%	106 53%	0.88

Table A 5.3
Difficulties in Using Library Services Vs Nativity

S. No.	Description	Rural n = 191				Semi urban n = 144				Urban n = 65			
		Always	Sometimes	Never	Mean	Always	Sometimes	Never	Mean	Always	Sometimes	Never	Mean
1	Lending service	31 16.2%	19 9.9%	141 73.8%	2.58	23 16%	19 13.2%	102 70.8%	2.55	10 15.4%	11 16.9%	44 67.7%	2.52
2	Reference service	34 17.8%	25 13.1%	132 69.1%	2.51	27 18.8%	14 9.7%	103 71.5%	2.53	11 16.9%	10 15.4%	44 67.7%	2.51
3	Referral service	32 16.8%	28 14.7%	131 68.6%	2.52	25 17.4%	19 13.2%	100 69.4%	2.52	14 21.5%	12 18.5%	39 60%	2.38
4	Inter library loan	63 33%	61 31.9%	67 35.1%	2.02	46 31.9%	44 30.6%	54 37.5%	2.06	20 30.8%	36 55.4%	9 13.8%	1.83
5	Consortium service	39 20.4%	79 41.4%	73 38.2%	2.18	25 17.4%	58 40.3%	61 42.4%	2.25	12 18.5%	35 53.8%	18 27.7%	2.09
6	Online service	89 46.6%	53 27.7%	49 25.7%	1.79	68 47.2%	39 27.1%	37 25.7%	1.78	29 44.6%	24 36.9%	12 18.5%	1.74
7	CAS	51 26.7%	28 14.7%	112 58.6%	2.32	41 28.5%	7 4.9%	96 66.7%	2.38	22 33.8%	11 16.9%	32 49.2%	2.15
8	Reprography service	44 23%	35 18.3%	112 58.6%	2.36	39 27.1%	29 20.1%	76 52.8%	2.26	11 16.9%	10 15.4%	44 67.7%	2.51
9	Cataloguing service	68 35.6%	48 25.1%	75 39.3%	2.04	38 26.4%	29 20.1%	77 53.5%	2.27	16 24.6%	20 30.8%	29 44.6%	2.20

Appendix- D

List of Arts and Science colleges affiliated to Bharathidasan University

(As per the year 2009)

01. LIST OF AUTONOMOUS COLLEGES

A. Government Colleges (Co- education)

- Government Arts College, Karur - 639 005.
- Government Arts College, Kumbakonam - 612 001.
- H.H. The Rajah's College, Pudukkottai - 622 001.
- Periyar E.V.R. College, Tiruchirappalli - 620 023.
- Rajah Serfoji Government College, Thanjavur - 613 005.

B. Government Colleges (Women)

- Government Arts College for Women, Pudukkottai - 622 001.
- Government College for Women, Kumbakonam - 612 001.
- Kundavai Naachiyaar Government College for Women, Thanjavur - 613 007.

C. Aided Colleges (Co- education)

- A.V.C. College, Mannampandal, Mayiladuthurai - 609 305.
- A.V.V.M. Sri Pushpam College, Poondi - 613 503.
- Bishop Heber College, Tiruchirappalli - 620 017.
- Jamal Mohamed College, Tiruchirappalli - 620 020.
- Nehru Memorial College, Puthanampatti - 621 007.
- Poompuhar College, Melaiyur - 609 107.
- St. Joseph's College, Tiruchirappalli - 620 002.

D. Aided Colleges (Women)

- A.D.M. College for Women, Nagapattinam - 611 001.
- Holy Cross College, Tiruchirappalli - 620 002.
- Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002.

02. NON AUTONOMOUS COLLEGES

A. Government Colleges (Co- education)

- A.A. Government Arts College, Musiri - 621 201.
- Government Arts College, Aiyar Malai, Kulithalai, Karur - 639 120
- Government Arts College, Ariyalur - 621 713.
- Government Arts College, Tiruchirappalli - 620 022.
- M.R. Government Arts College, Mannargudi - 614 001.
- Thiru. Vi. Ka. Government Arts College, Thiruvarur - 610 003.

B. Government Colleges (Women)

- D.G. Government Arts College for Women, Mayiladuthurai - 609 001.

C. Aided Colleges

- Dharmapuram Adhinam Arts College, Dharmapuram, Mayiladuthurai - 609 001.
- Ganesar Senthamil College of Arts and Science, Melaisivapuri - 622 403.
- Khadir Mohideen College, Adirampattinam - 614 701.
- National College, Tiruchirappalli - 620 001.
- Rajah's College, Thiruvaiyaru - 613 204.
- S.K.S.S. Arts College, Thiruppanandal - 612 504.
- T.B.M.L. College, Porayar - 609 307.
- Tamilavel Umamaheswaranar Karanthai Arts College, Thanjavur - 613 002.
- Urumu Dhanalakshmi College, Tiruchirappalli - 620 019.

D. Unaided Colleges (Self finance) (Co- education)

- A.R.C. Viswanathan College, Mayiladuthurai, Nagapattinam - 609 003.
- ABI & ABI College, Vayalur, Thanjavur - 613 003.
- Aadhavan Arts and Science College, Alathur Village, Chettiyappatty Panchayat, Manapparai (Tk), Tiruchirappalli - 621 306
- Annai College of Arts & Science, Kumbakonam-612 503.
- Adaikala Matha College, Arun Nagar, Vallam, Thanjavur - 613 403.
- Annai Vailankanni College of Arts and Science, V.O. C. Nagar, Thanjavur - 613 007.
- Arputha College of Arts & Science, Arputha Nagar, Vamban - 622 303.
- Arungarai Amman College of Arts & Science, Chinnatharapuram, Aravakkurichi, Karur - 639 202.
- Best Arts and Science College, 46, Kaivilancherry Road, Thenpathi, Sirkali Taluk, Nagapattinam District-609 111.
- Bharath College of Science & Management, South Garden, Thanjavur - 613 007.
- Cambridge College of Arts and Science, Vettamangalam, Karur District-639 117.
- Chettinad College of Arts & Science, Contonment, Tiruchirappalli - 620 001.
- Christhu Raj College, Panjapur, Edamalaipatti Pudur, Tiruchirappalli - 620 012.
- Deen College of Arts and Science, Nidur-Kaduvangudi, Aruvappadi Village, Mayiladuthurai, Nagapattinam (Dt.) - 609 203
- Dharmambal Ramasamy Arts & Science College, Orathanadu T.k.Thanjavur - 614 625.
- Dr. Nallikuppusamy Arts College, Manakkarambai, Thanjavur - 613 003.
- Edayathangudi G.S. Pillai Arts & Science College, Nagapattinam - 611 001.
- Elizabeth College of Arts & Science, Annamangalam (Po), Vepanthattai (Tk.) Perambalur - 620 102.

- Enathi Rajappa College of Arts & Science, Enathi Post, Pattukkottai - 614 615.
- Imayam College of Arts & Science, Thuraiyur- 621 206.
- Jairams Arts & Science College, NH7, Karur-Madurai By-Pass Road, Aattamparappu, Kakavadi (P.O), Karur - 639 003.
- J.J. College of Arts & Science, Namanasamuthiram, Pudukkottai - 622 404.
- Kalaimahal College of Arts and Science, Sembanarkoil, Tharangambadi Taluk, Naagappatinam - 609 309.
- Kongu College of Arts & Science, Deeran Chinnamalai Nagar, Karur - 639 006.
- Kurinji College of Arts & Science, Green Ways Road, Tiruchirappalli - 620 002.
- M.I.E.T. Arts College, Gundur, Tiruchirappalli - 620 007.
- MASS College of Arts and Science, Kumbakonam.
- Mahatma Arts and Science College, Ariyur Village,Illuppur Taluk, Pudukkottai District – 622 101
- Maruthu Pandiyar College, Vallam (P.O.), Thanjavur - 613 403.
- Meenakshi Chandrasekaran College of Arts & Science, Pattukkottai - 614 601.
- Meenakshi Ramasamy Arts and Science College, Udaiyarpalayam, Ariyalur - 621 804.
- Modern Arts and Science College, 35A, Sannathi Street, Jayankondam, - 621 802.
- Mother Terasa College of Arts and Science, Mettusalai, Veerapatti Village, Illupur Post, Pudukkottai - 622 102.
- Naina Mohamed College of Arts & Science, Rajendrapuram, Pudukkottai - 614 624.
- National Arts and Science College, Trichy Road, Jayankondam, Ariyalur Dt. 621 802.
- Nethaji Subash Chandra Bose College, Thiruvarur- 614 001.
- Navalar Na. Mu. Venkatasamy Nattar Thiruvarul Kallori, Kabilar Nagar, Vennatrankarai, Thanjavur - 613 003.
- Paventhar Bharathidasan College of Arts & Science.
- Rajagiri Dawood Batcha College of Arts & Science, Papanasam, Thanjavur - 614 207.
- Sadasivam Kathirkamavalli College of Arts and Science, Melavasal, Mannargudi, Thiruvarur District.
- Sami Arul Arts & Science College, Sami Arul Nagar, Vallam, Thanjavur - 613 007.
- Sir Issac Newton Arts & Science College, Pappakoil Village, Anthanapettai (Po), Nagapttinam Dt. - 611 001
- S.K. Arts and Science College, Thamaraipulam, Vedaranyam, 614 809.
- Sri Sankara Arts and Science College, Neelathanallur Road, Asur, Kumbakonam, 612 501
- Sri Suba Bharathi Arts and Science College (Co-Educational), Alangudi, Pudukkottai Dt. - 622 301.

- Sri Venkateshwara College of Arts & Science, Peravurani - 614 804.
- Srimad Andavan Arts & Science College, Thiruvanaikoil, Tiruchirappalli - 620 005.
- Srinivasan College of Arts and Science, Perambalur - 621 212.
- State Institute of Hotel Management & Catering Technology, Thuvakkudi, Tiruchirappalli Dt. - 620 015.
- Sudharsan College of Arts Science, Perumanadu Village, Iluppur Taluk,Pudukkottai - 622 104.
- Swami Dayananda College of Arts & Science, Tiruvarur - 612 610.
- Thanthai Hans Roever College, Perambalur - 621 212.
- Valluvar College of Science and Management, Kodaiyur, Aravakurichi Taluk, Karur - 639 003
- Vivekananda Arts and Science College for Women, Thenpathi, NSB Nagar, Sirkali Taluk, Nagapattinam - 609 111.

E. Unaided Colleges (Women) (Self finance)

- Aiman College of Arts & Science for Women, K. Sathanur , Tiruchirappalli - 620 021.
- Annai Women's College, Aurobindo Nagar, TNPL Road, Punnamchathiram, Karur 639 136.
- Auxilium College of Arts and Science for Women,Regunathapuram Village,Alangudi Taluk,Pudukkottai District - 622 302.
- Bon Secours College for Women, Vilar Bye pass Road, Thanjavur - 613 006.
- Cauvery College for Women, Annamalai Nagar, Tiruchirappalli - 620 018.
- Chidambaram Pillai College for Women, Manachanallur, Tiruchirappalli - 621 005.
- Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur - 621 212.
- Idhaya College of Women, Sakkottai, Kumbakonam 612 001.
- Mother Gnanamma Women's College of Arts and Science, Varadarajanpet, Jeyankondam Taluk,Ariyalur District
- Rabiammal Ahamed Maideen College for Women, Thiruvarur - 610 002.
- Sengamala Thayaar Educational Trust Women's College, Mannargudi - 614 001.
- Servite Arts and Science College for Women, Thogaimalai Panchayat, Kaladai Village, Karur Dist. - 621 313
- Shrimati Indira Gandhi College, Tiruchirappalli - 620 002.
- Sri Bharathi Arts and Science College (W), Pudukkottai 622 303.
- Sri Sarada Niketan College of Science for Women, Karur - 639 005.
- Sri Saradha College for Women, Perambalur - 621 212.
- Subashkathi Arts and Science College for Women, Kulithalai - 639 120.
- Sulthana Abdullah Rowther College for Women, Thiruvarur - 614 101.

Appendix E

List of User Respondents of Arts & Science Colleges affiliated to Bharathidasan University

Zone 1 Tiruchirappalli Zone

A. Government

- Periyar E.V.R. College, Tiruchirappalli - 620 023

B. Government Aided

- Holy Cross College, Tiruchirappalli - 620 002

C. Self finance

- Christhu Raj College, Panjapur, Edamalaipatti Pudur, Tiruchirappalli - 620 012.
- Chidambaram Pillai College for Women, Manachanallur, Tiruchirappalli - 621 005.

Zone 2 Thanjavur zone

A. Government

- D.G. Government Arts College for Women, Mayiladuthurai - 609 001.

B. Government Aided

- A.V.V. M Sri pushpam college, Poondi

C. Self finance

- Annai College of Arts & Science, Kumbakonam-612 503
- Bon Secours College for Women, Vilar Bye pass Road, Thanjavur - 613006

Zone 3 Pudukkottai zone

A. Government

- Government Arts College for Women, Pudukkottai - 622 001

B. Government Aided

- Ganesar Senthamil College of Arts and Science, Melaisivapuri - 622 403.

C. Self finance

- MASS College of Arts and Science, Kumbakonam Paventhar Bharathidasan College of Arts & Science, Pudukkottai - 622 515.
- Paventhar Bharathidasan College of Arts & Science, Pudukkottai - 622 515.

Zone 4 Ariyalur

A. Government

- Government Arts College, Aiyar Malai, Kulithalai, Karur - 639 120

B. Government Aided

- Poompuhar College, Melaiyur - 609 107

C. Self finance

- Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur
- Thanthai Hans Roever College, Perambalur - 621 212.